

EPA Registration # 74578-3

Volume 2

Material to be added to an e-Jacket/Jacket

Reg. No. 74578-3

1. ☒ Placement within the e-Jacket/jacket:

- ☐ Default: (chronological, top/newest)
- ☐ Description: (PDF page number, i.e., "before page 45")

FINAL PRINTED LABEL

2. ☐ Send to Data Extraction contractors this material:

- ☐ Newly stamped accepted label
- ☐ Notification
- ☐ New CSF
- ☐ Other: _____

3. Attach this coversheet to the top of the material or jacket. It must be well organized and clipped together, NOT STAPLED. Then give the material with this coversheet to staff in the Information Services Center (Room S-4900).

Reviewer's name: Sylvester George

Phone: 603-0688 Division: BPPD

Date: 9/12/2012

Print Letter
Enter More Information
Tracking

Form B: ☐ Signature Date:

Rec'd
10-9-12-12
AB



September 10, 2012

Document Processing Desk (FINAL)
Office of Pesticide Programs (7511)
Environmental Protection Agency
One Potomac Yard
2777 South Crystal Drive, Room S-4900
Arlington VA 22202

Attn: Linda Hollis, Chief Biochemical Pesticides Branch
Biopesticides and Pollution Prevention Division (BPPD)

RE: Final label as requested in EPA approval letter dated March 9, 2012
Product name: PHOSPHO-jet
EPA Reg. No.: 74578-3
Company: Arborjet, Inc.

Dear Ms. Hollis:

On behalf of Arborjet, Inc., I am submitting a final label for the product PHOSPHO-jet, EPA Reg. No: 74578-3, as requested in EPA's stamped label letter dated 6/18/12. Per your request we are sending 3 copies of the "final printed label that is used when distributed or sold."

Enclosures:

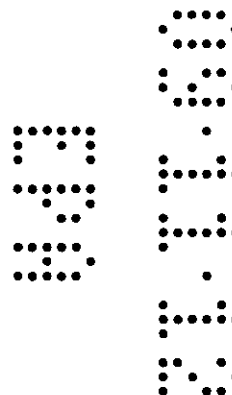
- Application for Pesticide (EPA Form 8570-1)
- 3 copies of final label
- EPA approval letter dated 3/9/12

If you have questions regarding this submission or require additional information, please contact me at cgriffin@delta-ac.com or (301) 680-7971.

Sincerely,

A handwritten signature in black ink, appearing to read "Cristina Griffin".

Cristina Griffin, Agent for Arborjet, Inc.





United States
Environmental Protection Agency
Washington, DC 20460

☐ Registration
☐ Amendment
☒ Other

OPP Identifier Number

FINAL**Application for Pesticide - Section I**

1. Company/Product Number
74578-3

2. EPA Product Manager
**Linda Hollis, Chief Biochemical
Pesticides Branch**

3. Proposed Classification
☐ None ☐ Restricted

4. Company/Product (Name)
ARBORJET, INC. / PHOSPHO-jet

PM#
**Biopesticides and Pollution
Prevention Division**

5. Name and Address of Applicant (Include ZIP Code)
**ARBORJET, INC.
c/o Delta Analytical Corp.
12510 Prosperity Dr. Suite 160
Silver Spring, MD 20904**

☐ Check if this is a new address

6. **Expedited Review.** In accordance with FIFRA Section 3(c)(3)(b)(i), my product is similar or identical in composition and labeling to:

EPA Reg. No. _____

Product Name _____

**Complies with
EPA Accepted Labeling**

Section - II

Date: **8/09/2012**

☐ Amendment - Explain below
☐ Resubmission in response to Agency letter dated _____
☐ Notification - Explain below.

☒ Final printed labels in response to Agency letter dated **3/9/12**
☐ "Me Too" Application.
☐ Other - explain below.

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

Final Printed Label Submission.

Section - III**1. Material this Product will be Packaged in:**

Child-Resistant Packaging
☐ Yes*
☐ No

Unit Packaging
☐ Yes
☐ No

Water Soluble Packaging
☐ Yes
☐ No

*** Certification must
be submitted.**

If "Yes,"
Unit Package wgt.
No. per container

If "Yes,"
Unit Package wgt.
No. per container

2. Type of Container
☐ Metal
☐ Plastic
☐ Glass
☐ Paper
☐ Other (Specify) _____

3. Location of Net Contents Information

☐ Label ☐ Container

4. Size(s) of Retail Container**5. Location of Label Direction**

☐ On Label
☐ On Labeling accompanying product

6. Manner In Which Label Is Affixed to Product

☐ Lithograph
☐ Paper glued
☐ Stenciled

☐ Other _____

Section - IV**1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)**

Name
Cristina Griffin

Title
Agent for Arborjet Inc.

Telephone No. (Include Area Code)
301-580-7571

Certification

I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

2. Signature

3. Title
Agent for Arborjet Inc.

4. Typed Name
Cristina Griffin

5. Date
September 10, 2012

Date Application
Received

(Stamped)

74578-3

03-09-2012

1
14

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 09 2012

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

Christina Griffin, Agent
Arborjet, Inc.
c/o Delta Analytical Corp.
12510 Prosperity Dr. Suite 160
Silver Spring, MD 20904

Subject: Phospho-jet
EPA Registration No. 74578-3
Label Amendment to amend the directions for use
Decision # 457154
Application Dated: October 27, 2011

Dear Mrs. Griffin:

The amendment referred to above, submitted in connection with registration under FIFRA section 3(c)(5), is acceptable provided that you:

1. Submit and/or cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5) when the Agency requires all registrants of similar products to submit such data.
2. Submit three (3) copies of your final printed labeling before you release the product for shipment. Final printed labeling means the label or labeling of the product when distributed or sold. Clearly legible reproductions or photo reductions will be accepted for unusual labels, such as those silk-screened directly onto glass or metal containers or large bags or drum labels.

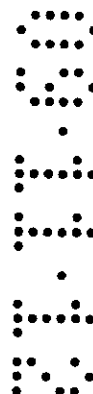
If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(b). Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions.

If you have any questions contact Ms. Menyon Adams at 703-347-8496 or by email at: adams.menyon@epa.gov. A stamped copy of the label is enclosed for your records.

Sincerely,

A handwritten signature in black ink, appearing to read "Linda A. Hollis".

Linda A. Hollis, Chief
Biochemical Pesticides Branch
Biopesticides and Pollution
Prevention Division (7511P)



ARBORICULTURE IN MOTION[®]

PHOSPHO-jet

SYSTEMIC FUNGICIDE

Systemic fungicide for the suppression of various plant diseases including root rot in avocado and citrus, bud rot and nut fall in coconut, black spot, scab, fire blight in apple, anthracnose in mango, sycamore, and dogwood, *Phytophthora* (causative of Sudden Oak Death) in oak, and for effective control of *Phytophthora* and *Pythium* diseases associated with stem and Canker Blight, Beech Decline, and general tree declines in landscapes.

ACTIVE INGREDIENT:

Mono- & di-potassium salts of Phosphorous Acid...45.8%

OTHER INGREDIENTS.....54.2%

TOTAL.....100.0%

Contains: 5.17lbs/gallon of the active ingredients, mono- and di-potassium salts of Phosphorous acid. Equivalent to 3.35 lbs Phosphorous acid/gallon.

EPA Reg No. 74578-3 • EPA Est. No. 74578-MA-001

Net Contents: 1.057 Quarts (1 Liter)

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

FIRST AID

IF SWALLOWED

- Call a poison control center or doctor immediately for treatment advice.
- Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to do so by a poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

IF IN EYES

- Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
- Call a poison control center or a doctor for treatment advice.

IF ON SKIN OR CLOTHING

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or a doctor for treatment advice.

IF INHALED

- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferable mouth-to-mouth, if possible.
- Call a poison control center or a doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact the National Poison Control Hotline at 1-800-222-1222, 24 hours a day, 7 days a week.

Manufactured by: ARBORJET, Inc.

99 Blueberry Hill Road, Woburn, MA 01801 781-935-9070

ARBORJET
Revolutionary Plant Health Solutions

Complies with
EPA Accepted Labeling

Date: 8/09/2012

Reviewer: Sylvester George

8/13/12

DIRECTIONS FOR USE:

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Read entire label before using this product. Do not apply this product in any way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide registration.

See booklet for complete directions for use.

RESTRICTIONS:

- Do not inject trees more than once annually unless otherwise indicated.
- Not recommended for newly planted (non-established) trees.
- DO NOT inject drought stressed trees.
- Do not treat trees that are damaged by herbicides.
- Do not inject trees within two weeks of any other spray or soil chemical treatment.

PRECAUTIONARY STATEMENTS:

HAZARDS TO HUMANS AND DOMESTIC ANIMALS. CAUTION. Harmful if swallowed, inhaled or absorbed through skin. Causes moderate eye irritation. Avoid breathing vapors or spray mist. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

See booklet for other precautions and Storage and Disposal.

STORAGE AND DISPOSAL:

See attached leaflet for storage and disposal.



8 11890 01141 6

INSERT

2 3
2 4
3 5

PHOSPHO-JET

SYSTEMIC FUNGICIDE

Systemic fungicide for the suppression of various plant diseases including root rot in avocado and citrus, bud rot and nut fall in coconut, black spot, scab, fire blight in apple, anthracnose in mango, sycamore, and dogwood, *Phytophthora* (causative of Sudden Oak Death) in oak, and for effective control of *Phytophthora* and *Pythium* diseases associated with stem and Canker Blight, Beech Decline, and general tree declines in landscapes.

ACTIVE INGREDIENT:

Mono- and di-potassium salts of Phosphorous Acid 45.8%

OTHER INGREDIENTS 54.2%

TOTAL 100.0%

Contains: 5.17 lbs/gallon of the active ingredients, mono- and di-potassium salts of Phosphorous acid.

Equivalent to 3.35 lbs Phosphorous acid/gallon.

EPA Reg No. 74578-3 • EPA Est. No. 74578-MA-001

Net Contents: 1.057 Quarts (1 Liter)

KEEP OUT OF REACH OF CHILDREN CAUTION

Manufactured by: ARBORJET, Inc., 99 Blueberry Hill Road, Woburn, MA 01801 781-935-9070

FIRST AID

IF SWALLOWED:

- Call a poison control center or doctor immediately for treatment advice.
- Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to do so by a poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

IF IN EYES:

- Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
- Call a poison control center or a doctor for treatment advice.

IF ON SKIN OR CLOTHING:

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or a doctor for treatment advice.

IF INHALED:

- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferable mouth-to-mouth, if possible.
- Call a poison control center or a doctor for treatment advice.

Have the product container of label with you when calling a poison control center or doctor or going for treatment. You may also contact the National Poison Control Hotline at 1-800-222-1222, 24 hours a day, 7 days a week.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION. Harmful if swallowed, inhaled or absorbed through skin. Causes moderate eye irritation. Avoid breathing vapors or spray mist. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Applicators and other handlers must wear protective eyewear, long pants and long-sleeved shirt, waterproof gloves, shoes plus socks.

Follow manufacturer's instructions for maintaining/cleaning personal protective equipment (PPE). If no such instructions for washables, use hot water and detergent. Keep and wash PPE separately from other laundry.

When handlers use closed systems, aircraft or enclosed cabs in a manner that meets the requirements listed in the worker protection standard (WPS) for agricultural pesticides (40 CFR 170.240 (d) (4-6), the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS:

Users should:

- Wash hands before drinking, eating, chewing gum, using tobacco, or using the toilet.
- Remove PPE clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS:

For Terrestrial uses: Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Read entire label before using this product.

Do not apply this product in any way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide registration.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Workers Protection Standard, CFR 40 part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours. PPE required for early entry to treated areas that are permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soils or water: is coveralls, waterproof gloves, shoes plus socks, and protective eyewear.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements of this box apply to uses of this product that are not within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

Do not enter treated areas without protective clothing until sprays have dried.

GENERAL APPLICATION INSTRUCTIONS

This product is for use with the ARBORJET TREE INJECTION SYSTEMS or those systems that meet the label and dosage requirements. Follow manufacturer's directions for use.

MICRO-INJECTION APPLICATIONS FOR USE AS FORMULATED

PHOSPHO-Jet may be applied undiluted by micro-injection. The PHOSPHO-Jet dose rate is 5 mL per inch DBH.

Calculating Application Rate

The dosages and number of application sites are based on tree diameter.

To determine the application/dose rate per tree:

- 1) Measure the tree diameter in inches at chest height (54" from ground) to find the Diameter at Breast Height (DBH). (If measuring tree circumference, divide circumference by 3 to obtain the DBH in inches.)
- 2) Calculate the number of injection sites by dividing the DBH in inches by 2.
- 3) Multiply the tree DBH by the dosage rate (5 mL per inch DBH) to calculate the total dose in milliliters per tree.
- 4) Divide the total dose by the number of injection sites to determine required dosage per injection site.
Example: For a tree with a DBH of 12 inches (or circumference of 36 inches) and 5 mL dosage rate:
1) DBH = 12" (circumference 36" ÷ 3 = 12")
2) Divide DBH of 12" by 2 = 6 injection sites.
3) Multiply DBH of 12 by 5 mL = 60 mL total dose per tree.
4) Divide 60 mL by 6 injection sites = 10 mL per injection site to deliver the required dosage.

Ornamental, Forest, Conifers, and Crop Trees

CALCULATING APPLICATION RATE AND MIXING INSTRUCTIONS (for micro-injection; for other methods see supplemental information)

- 1) To determine the application rate, refer to Table 1. Identify plant size by determining tree diameter in inches at breast height (DBH) (measured at approximately 54" above the soil line). (If measuring tree circumference divide by 3 to obtain the DBH.)
- 2) Multiply the DBH by the corresponding amount in the rate column to determine the application rate appropriate for plant size.
- 3) 1 part PHOSPHO-Jet is diluted with 2 parts water. Determine the amount of water to be added by multiplying the mL PHOSPHO-Jet (obtained in step #2 above) by 2.
- 4) Fill the tank with the water before adding PHOSPHO-Jet.
- 5) Add PHOSPHO-Jet slowly to the tank, close and gently agitate to mix.

Example: To treat a 10" DBH oak for root rot, see Table 1. Add 50 mL of PHOSPHO-Jet (10" DBH x 5 mL) into 100 mL (2 x 50 mL) water for a total injection volume of 150 mL. Inject 30 mL of the PHOSPHO-Jet/water solution every 6" of trunk circumference as directed in Supplemental Label Arborjet Injection Procedures.

TABLE 1: PHOSPHO-JET USE AND APPLICATION RATES

Plant	Disease	Plant Size (DBH")	Rate (mL/DBH")
Ornamental & Forest Trees	Root Rot (<i>Phytophthora</i> spp. including <i>P. ramorum</i> , <i>P. cinnamomi</i> , <i>P. palmivora</i> , <i>P. cactorum</i>), Anthracnose, Apple scab (<i>Venturia inaequalis</i>)	<12-23"	5
		24-47"	7
		48"+	9
Conifers, grown in commercial nurseries, plantations, and forest (including Christmas tree farms)	Root Rot (<i>Phytophthora</i> spp. including <i>P. ramorum</i> , <i>P. cinnamomi</i>)		
Crop Trees	Disease	Plant Size (DBH")	Rate (mL/DBH")
Avocados	Root Rot (<i>Phytophthora cinnamomi</i> , <i>P. citricola</i>)		
Citrus (mature trees)	Root, Foot and Collar Rot (<i>Phytophthora</i> spp. including <i>P. nicotianae</i> , <i>P. citrophthora</i>)	<12-23" 24-27" 48"+	5
Coconuts	Bud - Nut Fall (<i>Phytophthora palmivora</i>)		7
			9
Apples, Pears, Loquats, Quince	Fire Blight (<i>Erwinia amylovora</i>); Apple Scab (<i>Venturia inaequalis</i>); Black Spot (<i>Diplocarpon rosae</i>)		
Tree nuts such as Almonds, Walnuts	Root and Collar Rot (<i>Phytophthora</i> spp.)		

SUDDEN OAK DEATH*

Use PHOSPHO-Jet for effective control of *Phytophthora* (Sudden Oak Death, *Phytophthora ramorum*), in landscapes, plantation trees, golf courses, forests and parks. Apply PHOSPHO-Jet to Oaks (Black Canyon, Coast Live, Shreve) and Tan Oak.

Make applications before disease development and in conjunction with good cultural management practices. Do not exceed indicated application rates or apply more frequently than stated on label or tree injury may occur. Do not apply to trees that are heat or moisture stressed.

PHOSPHO-JET APPLICATION FOR OAKS

Landscape, Golf Course, Plantation, Forest, and Park Applications	Disease	Rate
Oak (<i>Quercus</i> spp.) including Black Canyon, Coast Live, Shreve, Tan Oak	Sudden oak death <i>Phytophthora ramorum</i>	10 mL per 6 inch circumference (3.5 mL PHOSPHO-Jet and 6.5 mL water)

[CONTINUED]

CALCULATING APPLICATION RATES & MIXING INSTRUCTIONS

The dilution rate is 1 part PHOSPHO-jet to 2 parts water. One injection of 10 ml of the PHOSPHO-jet / water solution is used per 6 inches of trunk circumference measured at 4 feet above the soil line.

In order to determine the application rate per tree:

- 1) Measure the trunk circumference 4 feet above the soil line.
- 2) Divide the number of inches of circumference by 6 to determine the number of injection sites.
- 3) Each 10 ml solution injection will have 3.5 ml PHOSPHO-jet and 6.5 ml water.
- 4) Multiply the number of injection sites by 3.5 to determine the amount of PHOSPHO-jet needed.
- 5) Multiply the number of injection sites by 6.5 to determine the amount of water needed.
- 6) Fill the tank with the water before adding PHOSPHO-jet.
- 7) Add PHOSPHO-jet slowly to the tank to reach the total amount of solution desired. (Total volume should equal number of injection sites x 10 ml.) Close and gently agitate to mix.

Example: A trunk has a circumference of 48". Dividing by 6 = 8 injection sites. Multiplying 8 by 3.5 = 28 ml PHOSPHO-jet. Multiplying 8 by 6.5 = 52 ml water. Therefore, prepare a treatment solution with 28 ml PHOSPHO-jet added to 52 ml of water for a total volume of 80 ml (8 injection sites of 10 ml each).

For multiple or asymmetrical trunks, measure the tree canopy at the drip line. The application rate is one 10ml injection per yard of canopy diameter.

Example: If the canopy diameter is 18 feet (6 yards), there will be 6 injection sites. Prepare a treatment solution with 21 ml PHOSPHO-jet (6 x 3.5 ml) added to 39 ml of water (6 x 6.5 ml) for a total volume of 60 ml (6 injection sites of 10 ml each).

Note: 324 ml (11 fl. oz) PHOSPHO-jet + 624 ml (21 fl. oz) water makes one quart of solution.

ARBORJET INJECTION PROCEDURES

General Guidelines:

Measure the tree diameter at chest height (54" from ground) in inches to find the Diameter at Breast Height (DBH). If measuring circumference, divide this number by three to determine Diameter at Breast Height (DBH).

Make applications to trees in full leaf. Alternatively, apply prior to bud break in spring or after leaf senescence (coloration or drop) in fall. Moist soil conditions and moderate temperatures (i.e., >40 and <90°F) favor transpiration and are optimal for injection uptake.

Drill injection sites into the trunk or root flare (i.e., buttress) area, generally 6-8" from the soil level and 6" apart around the circumference of the tree.

For Phytophthora (Sudden Oak Death, Phytophthora ramorum), inject every 6 inches around trunk circumference measured at 4 feet above the soil line.

Basic Arborjet Injection Procedures:

Drill 5/8" deep into the sapwood using the appropriate sized drill bit (7/32", 9/32" or 3/8" dia.). Drill at a 90 degree angle to the stem (i.e., straight into the sapwood). Avoid drilling into dead, dying or diseased tissue, or tissue with visible injury or cracks. Use clean and sharp drill bits. Initially apply no pressure to the drill; the bit will naturally cut through the bark. It will stop penetrating when it meets the harder sapwood. Next apply pressure to the drill to cut 5/8" into the sapwood.

Insert an Arborplug, and tap in using the set tool and mallet. Use the #3 (9/32" d) or #4 (3/8" d) Arborplug in hardwoods; in conifers, use the #4 Arborplug. Using the injection needle, pierce the internal septum to start the injection process. Shut off and remove the injection needle upon completion.

Resinous Conifers

In resinous conifers, such as pine and spruce insert the injection needle and open to start liquid flow immediately after inserting the Arborplug into the sapwood. A delay may reduce uptake due to resin flow. **Monocots**

Inject into the trunk into lignified (hardened, woody) tissues typically within 2-3 ft. of the soil. Drill into the stem 4" deep using the 3/8" drill bit. Insert a #4 Arborplug™. Inject through the Arborplug. Only one injection site is needed.

WHEN TO TREAT/TIMING OF STEM INJECTION APPLICATIONS

Tree Health and Growing Conditions:

Best results are obtained when treatments are applied prior to infection. Treat trees when foliar symptoms (e.g., spot defoliation, dieback) affect less than 10% of the canopy. Anticipate early season foliar infections by treating prior to bud break (for example, apple scab).

Phytophthora root rot occurs most frequently in poorly drained and compacted soils. Susceptible species are at risk of infection following heavy precipitation or irrigation. Trees growing in low lying areas are also at risk of disease. Treat as early as possible in the infection cycle for best tree response.

For optimal uptake, apply when soil is moist, soil temperatures are above 45°F, ambient temperatures are between 40° to 90°F, and during the 24 hour period when transpiration is greatest, typically before 2:00 PM. Applications to drought or heat stressed trees may result in injury to tree tissue, poor treatment and subsequent control. Watering the trees prior to injection may enhance the uptake of PHOSPHO-jet.

COMPATIBILITY

PHOSPHO-jet is compatible with most products used in agriculture. However, individual crop sensitivity to these mixtures may vary. Mixtures of PHOSPHO-jet with copper products are not always compatible or cause phytotoxicity to some plants. If these combinations or others have not been used previously, do not tank mix without first testing the compatibility of the tank mix. Do not apply tank mixture without first assessing its safety to the crop (phytotoxicity). Tank mix PHOSPHO-jet with fertilizers only if crop safety has been established and the PHOSPHO-jet use rates are followed.

Due to PHOSPHO-jet's acidic nature, do not use acidifying-type compatibility agents. If adjuvants are used, test them before use to confirm compatibility with PHOSPHO-jet.

Use a jar test to confirm compatibility with PHOSPHO-jet. In a clean jar using the same water source that is normally used to fill spray tank, add the appropriate quantity of water and mix thoroughly. Let stand for 3 minutes. If mixture remains in solution or is remixed readily, the tank mixture is compatible.

Spray the solution that results from the above compatibility test onto a few plants until foliage is visibly wet and inspect for visual effects of phytotoxicity (leaf burn) 3-7 days later.

RESTRICTIONS

- Do not inject trees more than once annually unless otherwise indicated.
- Not recommended for newly planted (non-established) trees.
- DO NOT inject drought stressed trees.
- Do not treat trees that are damaged by herbicides.
- Do not inject trees within two weeks of any other spray or soil chemical treatment.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE:

Keep this product in containers stored upright and secured with the original closure. Do not store this product near any heat source. Do not store near any strong oxidants. If transfer to another container becomes necessary, ensure that the container is clearly labeled, the container is a type suitable for the product, and is clean and free of other materials. Keep from freezing.

PESTICIDE DISPOSAL:

Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL:

Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying.

For containers small enough to shake (≤ 5 gallons)

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsates into application equipment or a mix tank or store rinsates for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

For containers too large to shake (> 5 gallons or 50 lbs.)

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Offer for recycling, if available.

NOTICE OF WARRANTY

ARBORJET, Inc. makes no warranty of fitness of this product for any other purpose, beyond its uses under normal conditions in keeping with the statements made on this label.

SUPPLEMENTAL LABEL

PHOSPHO-jet Application Rates for Micro-Injection Devices

See product label for application rate information.

Air/Hydraulic Micro-Injection Application

To inject, set the primary regulator to 75 PSI, charge the Dose-Sizer by pulling back on Dose-Sizer knob after priming, and apply the specified dose equally into the preset Arborplug.

QUICK-jet Micro-Injection Application

To Micro-Inject, set the Arborjet Tree Micro-Injector to the 5 ml setting. Draw formulation into the injector cylinder and squeeze handle to deliver the shot. Repeat until the full dose per injection site is delivered.

PHOSPHO-JET APPLICATION RATES FOR ARBORJET MICRO-INFUSION™ (I.E., TREE I.V.) APPLICATIONS

Tree Size DBH"	# Injection sites	Rate mL/ DBH"	Treatment Solution	
			PHOSPHO-jet mLs/tree size (avg.) (1 part)	Water (2 parts)
6-8"	4	5	35	70
9-11"	5	5	50	100
12-14"	7	5	65	130
15-17"	8	5	80	160
18-20"	10	5	95	190
21-23"	11	5	110	220
24-26"	13	7	175	350
27-29"	14	7	196	392
30-32"	16	7	217	434
33-35"	17	7	238	476
36-38"	19	7	259	518
39-41"	20	7	280	560
42-44"	22	7	301	602
45-47"	23	7	322	644
48-50"	25	9	446	882
51-53"	26	9	468	936
54-56"	28	9	495	990
57-59"	29	9	522	1044
60-62"	31	9	549	1098
63-65"	32	9	576	1152
66-68"	34	9	603	1206
69-71"	35	9	630	1260

CLEAN-UP

IMPORTANT! It is critical to rinse the Arborjet Injection System thoroughly after use. Use CLEAN-jet or soap and water. Residues left in the device will corrode the internal components and void equipment warranty.

ARBORJET
Revolutionary Plant Health Solutions

REV 8/2012

BOOKLET

3456
23

PHOSPHO-JET

SYSTEMIC FUNGICIDE

Systemic fungicide for the suppression of various plant diseases including root rot in avocado and citrus, bud rot and nut fall in coconut, black spot, scab, fire blight in apple, anthracnose in mango, sycamore, and dogwood, *Phytophthora* (causative of Sudden Oak Death) in oak, and for effective control of *Phytophthora* and *Pythium* diseases associated with stem and Canker Blight, Beech Decline, and general tree declines in landscapes.

ACTIVE INGREDIENTS:

Mono-and di-potassium salts of Phosphorous Acid.....	45.8%
OTHER INGREDIENTS	54.2%
TOTAL.....	100.0%

Contains: 5.17lbs/gallon of the active ingredients, mono- and di-potassium salts of Phosphorous acid. Equivalent to 3.35 lbs Phosphorous acid/gallon

EPA Reg No. 74578-3

EPA Est. No. 74578-MA-001

Net Contents: See Individual Container

KEEP OUT OF REACH OF CHILDREN
CAUTION

843

21-11-60

FIRST AID	
<p>If swallowed</p>	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
<p>If in eyes</p>	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.

<p>If on skin or clothing</p>	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
<p>If inhaled</p>	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. • Call a poison control center or doctor for treatment advice.
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact the National Poison Control Hotline at 1-800-222-1222, 24 hours a day, 7 days a week.</p>	

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION. Harmful if swallowed,
inhaled or absorbed through skin.
Causes moderate eye irritation.
Avoid breathing vapors or spray mist.
Avoid contact with skin, eyes,
or clothing. Wash thoroughly with
soap and water after handling.
Remove contaminated clothing and
wash before reuse.

USER SAFETY RECOMMENDATIONS:

Users should:

- Wash hands before drinking, eating, chewing gum, using tobacco, or using the toilet.
- Remove PPE clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Applicators and other handlers must wear protective eyewear, long pants and long-sleeved shirt, waterproof gloves, shoes plus socks.

Follow manufacturer's instructions for maintaining/cleaning personal protective equipment (PPE). If no such instructions for washables, use hot water and detergent. Keep and wash PPE separately from other laundry.

When handlers use closed systems, aircraft or enclosed cabs in a manner that meets the requirements listed in the worker protection standard (WPS) for agricultural pesticides (40 CFR 170.240 (d) (4-6)), the handler PPE requirements may be reduced or modified as specified in the WPS.

ENVIRONMENTAL HAZARDS:

For Terrestrial uses: Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Read entire label before using this product. Do not apply this product in any way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide registration.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Workers Protection Standard, CFR 40 part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours.

PPE required for early entry to treated areas that are permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soils or water, is: coveralls, waterproof gloves, shoes plus socks, and protective eyewear.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements of this box apply to uses of this product that are not within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

Do not enter treated areas without protective clothing until sprays have dried.

GENERAL APPLICATION INSTRUCTIONS

This product is for use with the **ARBORJET TREE INJECTION SYSTEMS** or those systems that meet the label and dosage requirements. Follow manufacturer's directions for use.

Micro-injection Applications for use as formulated.

PHOSPHO-jet may be applied undiluted by micro-injection. The PHOSPHO-jet dose rate is 5 mL per inch DBH.

CALCULATING APPLICATION RATE

The dosages and number of application sites are based on tree diameter.

To determine the application/dose rate per tree:

- 1) Measure the tree diameter in inches at chest height (54" from ground) to find the Diameter at Breast Height (DBH). (If measuring tree circumference, divide circumference by 3 to obtain the DBH in inches.)
- 2) Calculate the number of injection sites by dividing the DBH in inches by 2.
- 3) Multiply the tree DBH by the dosage rate (5 mL per inch DBH) to calculate the total dose in milliliters per tree.
- 4) Divide the total dose by the number of injection sites to determine required dosage per injection site.

Example: For a tree with a DBH of 12 inches (or circumference of 36 inches) and 5 mL dosage rate:

- 1) $DBH = 12''$ (circumference $36'' \div 3 = 12''$)
- 2) Divide DBH of 12" by 2 = 6 injection sites.

- 3) Multiply DBH" of 12 by 5 mL = 60 mL total dose per tree.
- 4) Divide 60 mL by 6 injection sites = 10 mL per injection site to deliver the required dosage.

Ornamental, Forest, Conifers, and Crop Trees

CALCULATING APPLICATION RATE AND MIXING INSTRUCTIONS

(for micro-injection; for other methods see supplemental information)

- 1) To determine the application rate, refer to Table 1 [reverse side]. Identify plant size by determining tree diameter in inches at breast height (DBH") (measured at approximately 54" above the soil line). (If measuring tree circumference divide by 3 to obtain the DBH".)
- 2) Multiply the DBH" by the corresponding amount in the rate column to determine the application rate appropriate for plant size.
- 3) 1 part PHOSPHO-jet is diluted with 2 parts water. Determine the amount of water to be added by multiplying the ml PHOSPHO-jet (obtained in step #2 above) by 2.
- 4) Fill the tank with the water before adding PHOSPHO-jet.
- 5) Add PHOSPHO-jet slowly to the tank, close and gently agitate to mix.

Example: To treat a 10" DBH oak for root rot, see Table 1. Add 50 ml of PHOSPHO-jet (10" DBH x 5ml) into 100 ml (2 x 50 ml) water for a total injection volume of 150 ml. Inject 30 ml of the PHOSPHO-jet/water solution every 6" of trunk circumference as directed in Supplemental Label Arborjet Injection Procedures.

TABLE I PHOSPHO-JET USE & APPLICATION RATES

Plant	Disease	Plant Size (DBH")	Rate (ml/DBH")
Ornamental & Forest Trees	Root Rot (Phytophthora spp. including P. ramorum, P. cinnamomi, P. palmivora, P. cactorum), Anthracnose, Apple scab (Venturia inaequalis)	<12-23" 24-47" 48"+	5
Conifers, grown in commercial nurseries, plantations, and forest (including Christmas tree farms)	Root Rot (Phytophthora spp. including P. ramorum, P. cinnamomi)		7 9
Crop Trees	Disease	Plant Size (DBH")	Rate (ml/DBH")
Avocados	Root Rot (Phytophthora cinnamomi, P. citricola)	<12-23" 24-27" 48"+	5
Citrus (mature trees)	Root, Foot and Collar Rot (Phytophthora spp. including P. nicotinae, P. citrophthora)		7
Coconuts	Bud – Nut Fall (Phytophthora palmivora)		9
Apples, Pears, Loquats, Quince	Fire Blight (Erwinia amylovora); Apple Scab (Venturia inaequalis); Black Spot (Diplocarpon rosae)		
Tree nuts such as Almonds, Walnuts	Root and Collar Rot (Phytophthora spp.)		

SUDDEN OAK DEATH*

Use PHOSPHO-jet for effective control of Phytophthora (Sudden Oak Death, Phytophthora ramorum), in landscapes, plantation trees, golf courses, forests and parks. Apply PHOSPHO-jet to Oaks (Black, Canyon, Coast, Live, Shreve) and Tan Oak.

Make applications before disease development and in conjunction with good cultural management practices. Do not exceed indicated application rates or apply more frequently than stated on label or tree injury may occur. Do not apply to trees that are heat or moisture stressed.

PHOSPHO-JET APPLICATION FOR OAKS		
Landscape, Golf Course, Plantation, Forest, and Park Applications	Disease	Rate
Oak (Quercus spp.) including Black, Canyon, Coast, Live, Shreve; Tan Oak	Sudden oak death Phytophthora ramorum	10 ml per 6 inch circumfer- ence (3.5 ml PHOSPHO-jet and 6.5 ml water)

CALCULATING APPLICATION RATE AND MIXING INSTRUCTIONS

The dilution rate is 1 part PHOSPHO-jet to 2 parts water. One injection of 10 ml of the PHOSPHO-jet /water solution is used per 6 inches of trunk circumference measured at 4 feet above the soil line.

In order to determine the application rate per tree:

- 1) Measure the trunk circumference 4 feet above the soil line.
- 2) Divide the number of inches of circumference by 6 to determine the number of injection sites.

[continued on next page]

3) Each 10 ml solution injection will have 3.5 ml PHOSPHO-jet and 6.5 ml water;

4) Multiply the number of injection sites by 3.5 to determine the amount of PHOSPHO-jet needed.

5) Multiply the number of injection sites by 6.5 to determine the amount of water needed.

6) Fill the tank with the water before adding PHOSPHO-jet.

7) Add PHOSPHO-jet slowly to the tank to reach the total amount of solution desired. (Total volume should equal number of injection sites \times 10 ml.) Close and gently agitate to mix.

Example: A trunk has a circumference of 48". Dividing by 6 = 8 injection sites. Multiplying 8 by 3.5 = 28 ml PHOSPHO-jet. Multiplying 8 by 6.5 = 52 ml water. Therefore, prepare a treatment solution with 28 ml PHOSPHO-jet added to 52 ml of water for a total volume of 80 ml (8 injection sites of 10 ml each).

For multiple or asymmetrical trunks, measure the tree canopy at the drip line. The application rate is one 10 ml injection per yard of canopy diameter.

Example: If the canopy diameter is 18 feet (6 yards), there will be 6 injection sites. Prepare a treatment solution with 21 ml PHOSPHO-jet (6×3.5 ml) added to 39 ml of water (6×6.5 ml) for a total volume of 60 ml (6 injection sites of 10 ml each).

Note: 324 ml (11 fl. oz) PHOSPHO-jet + 624 ml (21 fl. oz) water makes one quart of solution.

ARBORJET INJECTION PROCEDURES

GENERAL GUIDELINES:

Measure the tree diameter at chest height (54" from ground) in inches to find the Diameter at Breast Height (DBH). If measuring circumference, divide this number by three to determine Diameter at Breast Height (DBH).

Make applications to trees in full leaf. Alternatively, apply prior to bud break in spring or after leaf senescence (coloration or drop) in fall. Moist soil conditions and

moderate temperatures (i.e., >40 and <90°F) favor transpiration and are optimal

for injection uptake.

• Drill injection sites into the trunk or root flare (i.e., buttress) area, generally 6-8" from the soil level and 6" apart around the circumference of the tree.

For Phytophthora (Sudden Oak Death, Phytophthora ramorum), inject every 6 inches around trunk circumference measured at 4 feet above the soil line.

BASIC ARBORJET INJECTION PROCEDURES:

Drill 5/8" deep into the sapwood using the appropriate sized drill bit (7/32", 9/32" or 3/8" dia.). Drill at a 90 degree angle to the stem (i.e., straight into the sapwood). Avoid drilling into dead, dying or diseased tissue, or tissue with visible injury or cracks. Use clean and sharp drill bits. Initially apply no pressure to the drill; the bit will naturally cut through the bark. It will stop penetrating when it meets the harder sapwood. Next apply pressure to the drill to cut 5/8" into the sapwood.

Insert an Arborplug, and tap in using the set tool and mallet. Use the #3 (9/32" d) or #4 (3/8" d) Arborplug in hardwoods; in conifers, use the #4 Arborplug. Using the injection needle, pierce the internal septum to start the injection process. Shut off and remove the injection needle upon completion.

RESINOUS CONIFERS

In resinous conifers, such as pine and spruce insert the injection needle and open to start liquid flow immediately after inserting the Arborplug into the sapwood. A delay may reduce uptake due to resin flow.

MONOCOTS

Inject into the trunk into lignified (hardened, woody) tissues typically within 2-3 ft. of the soil. Drill into the stem 4" deep using the 3/8" drill bit. Insert a #4 Arborplug™. Inject through the Arborplug. Only one injection site is needed.

[continued on next page]

WHEN TO TREAT / TIMING OF STEM INJECTION APPLICATIONS

Tree Health and Growing Conditions:

Best results are obtained when treatments are applied prior to infection. Treat trees when foliar symptoms (e.g., spot, defoliation, dieback) affect less than 10% of the canopy. Anticipate early season foliar infections, by treating prior to bud break (for example, apple scab).

Phytophthora root rot occurs most frequently in poorly drained and compacted soils. Susceptible species are at risk of infection following heavy precipitation or irrigation. Trees growing in low lying areas are also at risk of disease. Treat as early as possible in the infection cycle for best tree response.

For optimal uptake, apply when soil is moist, soil temperatures are above 45°F, ambient temperatures are between 40° to 90°F, and during the 24 hour period when transpiration is greatest, typically before 2:00 PM.

Applications to drought or heat stressed trees may result in injury to

tree tissue, poor treatment and subsequent control. Watering the trees prior to injection may enhance the uptake of PHOSPHO-jet.

COMPATIBILITY

PHOSPHO-jet is compatible with most products used in agriculture. However, individual crop sensitivity to these mixtures may vary. Mixtures of PHOSPHO-jet with copper products are not always compatible or cause phytotoxicity to some plants. If these combinations or others have not been used previously, do not tank mix without first testing the compatibility of the tank mix. Do not apply tank mixture without first assessing its safety to the crop (phytotoxicity). Tank mix PHOSPHO-jet with fertilizers only if crop safety has been established and the PHOSPHO-jet use rates are followed.

Due to PHOSPHO-jet's acidic nature, do not use acidifying-type compatibility agents. If adjuvants are used, test them before use to confirm compatibility with PHOSPHO-jet.

Use a jar test to confirm compatibility with PHOSPHO-jet. In a clean jar using

the same water source that is normally used to fill spray tank, add the appropriate quantity of water and mix thoroughly. Let stand for 3 minutes. If mixture remains in solution or is remixed readily, the tank mixture is compatible.

Spray the solution that results from the above compatibility test onto a few plants until foliage is visibly wet and inspect for visual effects of phytotoxicity (leaf burn) 3-7 days later.

RESTRICTIONS

- DO NOT inject trees more than once annually unless otherwise indicated.
- Not recommended for newly planted (non-established) trees.
- DO NOT inject drought stressed trees.
- DO NOT treat trees that are damaged by herbicides.
- DO NOT inject trees within two weeks of any other spray or soil chemical treatment.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE:

Keep this product in containers stored upright and secured with the original closure. Do not store this product near any heat source. Do not store near any strong oxidants. If transfer to another container becomes necessary, ensure that the container is clearly labeled, the container is a type suitable for the product, and is clean and free of other materials. Keep from freezing.

PESTICIDE DISPOSAL:

Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL:

Nonrefillable container: Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying.

For containers small enough to shake (≤ 5 gallons)

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for

[continued on next page]

10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsates into application equipment or a mix tank or store rinsates for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

For containers too large to shake (> 5 gallons or 50 lbs.)

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

 Offer for recycling, if available.

NOTICE OF WARRANTY

ARBORJET, Inc makes no warranty of fitness of this product for any other purpose, beyond its uses under normal conditions in keeping with the statements made on this label.

SUPPLEMENTAL LABEL

PHOSPHO-jet Application Rates for Micro-injection Devices

See product label for application rate information.

Air/Hydraulic Micro-Injection Application

To inject, set the primary regulator to 75 PSI, charge the Dose-Sizer by pulling back on Dose-Sizer knob after priming, and apply the specified dose equally into the preset Arborplug.

QUIK-jet Micro-Injection Application

To Micro-Inject, set the Arborjet Tree Micro-Injector to the 5 ml setting. Draw formulation into the injector cylinder and squeeze handle to deliver the shot. Repeat until the full dose per injection site is delivered.

PHOSPHO-JET APPLICATION RATES
FOR ARBORJET MICRO-INFUSION™ (i.e., TREE I.V.) APPLICATIONS

Tree Size DBH"	# Injection sites	Rate mL/ DBH"	Treatment Solution	
			PHOSPHO-jet mLs/tree size (avg.) (1 part)	Water (2 parts)
6-8"	4	5	35	70
9-11"	5	5	50	100
12-14"	7	5	65	130
15-17"	8	5	80	160
18-20"	10	5	95	190
21-23"	11	5	110	220
24-26"	13	7	175	350
27-29"	14	7	196	392
30-32"	16	7	217	434
33-35"	17	7	238	476
36-38"	19	7	259	518
39-41"	20	7	280	560
42-44"	22	7	301	602
45-47"	23	7	322	644
48-50"	25	9	441	882
51-53"	26	9	468	936
54-56"	28	9	495	990
57-59"	29	9	522	1044
60-62"	31	9	549	1098
63-65"	32	9	576	1152
66-68"	34	9	603	1206
69-71"	35	9	630	1260

CLEAN-UP

IMPORTANT! It is critical to rinse the Arborjet Injection System thoroughly after use. Use **CLEAN-jet** or soap and water. Residues left in the device will corrode the internal components and void equipment warranty.

NOTES



Manufactured by: ARBORJET, INC.

781-935-9070

99 Blueberry Hill Road

Woburn, MA 01801

843

21.11.60

REV 7/2012

ARBORICULTURE IN MOTION®

PHOSPHO-jet

SYSTEMIC FUNGICIDE

Systemic fungicide for the suppression of various plant diseases including root rot in avocado and citrus, bud rot and nut fall in coconut, black spot, scab, fire blight in apple, anthracnose in mango, sycamore, and dogwood, *Phytophthora* (causative of Sudden Oak Death) in oak, and for effective control of *Phytophthora* and *Pythium* diseases associated with stem and Canker Blight, Beech Decline, and general tree declines in landscapes.

ACTIVE INGREDIENT:

Mono- & di-potassium salts of Phosphorous Acid.. 45.8%

OTHER INGREDIENTS.....54.2%

TOTAL 100.0%

Contains: 5.17lbs/gallon of the active ingredients, mono- and di-potassium salts of Phosphorous acid.

Equivalent to 3.35 lbs Phosphorous acid/gallon.

EPA Reg No. 74578-3 • EPA Est. No. 74578-MA-001

Net Contents: 1.057 Quarts (1 Liter)

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

FIRST AID

IF SWALLOWED

- Call a poison control center or doctor immediately for treatment advice.
- Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to do so by a poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

IF IN EYES

- Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
- Call a poison control center or a doctor for treatment advice.

IF ON SKIN OR CLOTHING

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or a doctor for treatment advice.

IF INHALED

- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferable mouth-to-mouth, if possible.
- Call a poison control center or a doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact the National Poison Control Hotline at 1-800-222-1222, 24 hours a day, 7 days a week.

Manufactured by: ARBORJET, Inc.

99 Blueberry Hill Road, Woburn, MA 01801 781-935-9070

ARBORjet
Revolutionary Plant Health Solutions

8/13/12

DIRECTIONS FOR USE:

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Read entire label before using this product. Do not apply this product in any way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide registration.

See booklet for complete directions for use.

RESTRICTIONS:

- Do not inject trees more than once annually unless otherwise indicated.
- Not recommended for newly planted (non-established) trees.
- *DO NOT* inject drought stressed trees.
- Do not treat trees that are damaged by herbicides.
- Do not inject trees within two weeks of any other spray or soil chemical treatment.

PRECAUTIONARY STATEMENTS:

HAZARDS TO HUMANS AND DOMESTIC ANIMALS. CAUTION. Harmful if swallowed, inhaled or absorbed through skin. Causes moderate eye irritation. Avoid breathing vapors or spray mist. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

See booklet for other precautions and Storage and Disposal.

STORAGE AND DISPOSAL:

See attached leaflet for storage and disposal.



Arboriculture in Motion® is a registered trademark of Arborjet, Inc. REV 7/2012

INSERT

945

PHOSPHO-JET

SYSTEMIC FUNGICIDE

Systemic fungicide for the suppression of various plant diseases including root rot in avocado and citrus, bud rot and nut fall in coconut, black spot, scab, fire blight in apple, anthracnose in mango, sycamore, and dogwood, Phytophthora (causative of Sudden Oak Death) in oak, and for effective control of Phytophthora and Pythium diseases associated with stem and Canker Blight, Beech Decline, and general tree declines in landscapes.

ACTIVE INGREDIENT:

Mono- and di-potassium salts of Phosphorous Acid.....45.8%

OTHER INGREDIENTS.....54.2%

TOTAL.....100.0%

Contains: 5.17 lbs/gallon of the active ingredients, mono- and di-potassium salts of Phosphorous acid.

Equivalent to 3.35 lbs Phosphorous acid/gallon.

EPA Reg. No. 74578-3 • EPA Est. No. 74578-MA-001

Net Contents: 1.057 Quarts (1 Liter)

KEEP OUT OF REACH OF CHILDREN CAUTION

Manufactured by: ARBORJET, Inc., 99 Blueberry Hill Road, Woburn, MA 01801 781-935-9070

FIRST AID

IF SWALLOWED:

- Call a poison control center or doctor immediately for treatment advice.
- Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to do so by a poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

IF IN EYES:

- Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present after the first 5 minutes, then continue rinsing eye.
- Call a poison control center or a doctor for treatment advice.

IF ON SKIN OR CLOTHING:

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or a doctor for treatment advice.

IF INHALED:

- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferable mouth-to-mouth, if possible.
- Call a poison control center or a doctor for treatment advice.

Have the product container of label with you when calling a poison control center or doctor or going for treatment. You may also contact the National Poison Control Hotline at 1-800-222-1222, 24 hours a day, 7 days a week.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION. Harmful if swallowed, inhaled or absorbed through skin. Causes moderate eye irritation. Avoid breathing vapors or spray mist. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Applicators and other handlers must wear protective eyewear, long pants and long-sleeved shirt, waterproof gloves, shoes plus socks.

Follow manufacturer's instructions for maintaining/cleaning personal protective equipment (PPE). If no such instructions for washables, use hot water and detergent. Keep and wash PPE separately from other laundry.

When handlers use closed systems, aircraft or enclosed cabs in a manner that meets the requirements listed in the worker protection standard (WPS) for agricultural pesticides (40 CFR 170.240 (d) (4-6), the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS:

Users should:

- Wash hands before drinking, eating, chewing gum, using tobacco, or using the toilet.
- Remove PPE clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS:

For Terrestrial uses: Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Read entire label before using this product.

Do not apply this product in any way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide registration.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, CFR 40 part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours. PPE required for early entry to treated areas that are permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soils or water, is: coveralls, waterproof gloves, shoes plus socks, and protective eyewear.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements of this box apply to uses of this product that are not within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

Do not enter treated areas without protective clothing until sprays have dried.

GENERAL APPLICATION INSTRUCTIONS

This product is for use with the ARBORJET TREE INJECTION SYSTEMS or those systems that meet the label and dosage requirements. Follow manufacturer's directions for use.

MICRO-INJECTION APPLICATIONS FOR USES AS FORMULATED

PHOSPHO-JET may be applied undiluted by micro-injection. The PHOSPHO-JET dose rate is 5 mL per inch DBH.

Calculating Application Rate

The dosages and number of application sites are based on tree diameter.

To determine the application/dose rate per tree:

- 1) Measure the tree diameter in inches at chest height (54" from ground) to find the Diameter at Breast Height (DBH). (If measuring tree circumference, divide circumference by 3 to obtain the DBH in inches.)
 - 2) Calculate the number of injection sites by dividing the DBH in inches by 2.
 - 3) Multiply the tree DBH by the dosage rate (5 mL per inch DBH) to calculate the total dose in milliliters per tree.
 - 4) Divide the total dose by the number of injection sites to determine required dosage per injection site.
- Example: For a tree with a DBH of 12 inches (or circumference of 36 inches) and 5 mL dosage rate:
- 1) DBH = 12" (circumference 36" ÷ 3 = 12")
 - 2) Divide DBH of 12" by 2 = 6 injection sites.
 - 3) Multiply DBH of 12 by 5 mL = 60 mL total dose per tree.
 - 4) Divide 60 mL by 6 injection sites = 10 mL per injection site to deliver the required dosage.

Ornamental, Forest, Conifers, and Crop Trees

CALCULATING APPLICATION RATE AND MIXING INSTRUCTIONS (for micro-injection; for other methods see supplemental information)

- 1) To determine the application rate, refer to Table 1. Identify plant size by determining tree diameter in inches at breast height (DBH) (measured at approximately 54" above the soil line). (If measuring tree circumference divide by 3 to obtain the DBH.)
- 2) Multiply the DBH" by the corresponding amount in the rate column to determine the application rate appropriate for plant size.
- 3) 1 part PHOSPHO-JET is diluted with 2 parts water. Determine the amount of water to be added by multiplying the mL PHOSPHO-JET (obtained in step #2 above) by 2.
- 4) Fill the tank with the water before adding PHOSPHO-JET.
- 5) Add PHOSPHO-JET slowly to the tank, dose and gently agitate to mix.

Example: To treat a 10" DBH oak for root rot, see Table 1. Add 50 mL of PHOSPHO-JET (10" DBH x 5 mL) into 100 mL (2 x 50 mL) water for a total injection volume of 150 mL. Inject 30 mL of the PHOSPHO-JET/water solution every 6" of trunk circumference as directed in Supplemental Label Arborjet Injection Procedures.

TABLE 1: PHOSPHO-JET USE AND APPLICATION RATES

Plant	Disease	Plant Size (DBH")	Rate (mL/DBH")
Ornamental & Forest Trees	Root Rot (Phytophthora spp. including P. ramorum, P. cinnamomi, P. palmivora, P. cactorum), Anthracnose, Apple scab (Venturia inaequalis)	<12-23"	5
		24-47"	7
		48"+	9
Conifers, grown in commercial nurseries, plantations, and forest (including Christmas tree farms)	Root Rot (Phytophthora spp. including P. ramorum, P. cinnamomi)		
Crop Trees		Plant Size (DBH")	Rate (mL/DBH")
Avocados	Root Rot (Phytophthora cinnamomi, P. citricola)	<12-23" 24-27" 48"+	5
Citrus (mature trees)	Root, Foot and Collar Rot (Phytophthora spp. including P. nicotianae, P. citrophthora)		7
Coconuts	Bud - Nut Fall (Phytophthora palmivora)		9
Apples, Pears, Loquats, Quince	Fire Blight (Erwinia amylovora); Apple Scab (Venturia inaequalis); Black Spot (Diplocarpon rosae)		
Tree nuts such as Almonds, Walnuts	Root and Collar Rot (Phytophthora spp.)		

SUDDEN OAK DEATH*

Use PHOSPHO-JET for effective control of Phytophthora (Sudden Oak Death, *Phytophthora ramorum*), in landscapes, plantation trees, golf courses, forests and parks. Apply PHOSPHO-JET to Oaks (Black Canyon, Coast Live, Shreve) and Tan Oak.

Make applications before disease development and in conjunction with good cultural management practices. Do not exceed indicated application rates or apply more frequently than stated on label or tree injury may occur. Do not apply to trees that are heat or moisture stressed.

PHOSPHO-JET APPLICATION FOR OAKS

Landscape, Golf Course, Plantation, Forest, and Park Applications	Disease	Rate
Oak (<i>Quercus</i> spp.) including Black Canyon, Coast Live, Shreve, Tan Oak	Sudden oak death <i>Phytophthora ramorum</i>	10 mL per 6 inch circumference (3.5 mL PHOSPHO-JET and 6.5 mL water)

[CONTINUED]

CALCULATING APPLICATION RATES & MIXING INSTRUCTIONS

The dilution rate is 1 part PHOSPHO-jet to 2 parts water. One injection of 10 ml of the PHOSPHO-jet / water solution is used per 6 inches of trunk circumference measured at 4 feet above the soil line.

In order to determine the application rate per tree:

- 1) Measure the trunk circumference 4 feet above the soil line.
- 2) Divide the number of inches of circumference by 6 to determine the number of injection sites.
- 3) Each 10 ml solution injection will have 3.5 ml PHOSPHO-jet and 6.5 ml water.
- 4) Multiply the number of injection sites by 3.5 to determine the amount of PHOSPHO-jet needed.
- 5) Multiply the number of injection sites by 6.5 to determine the amount of water needed.
- 6) Fill the tank with the water before adding PHOSPHO-jet.
- 7) Add PHOSPHO-jet slowly to the tank to reach the total amount of solution desired. (Total volume should equal number of injection sites x 10 ml.) Close and gently agitate to mix.

Example: A trunk has a circumference of 48". Dividing by 6 = 8 injection sites. Multiplying 8 by 3.5 = 28 ml PHOSPHO-jet. Multiplying 8 by 6.5 = 52 ml water. Therefore, prepare a treatment solution with 28 ml PHOSPHO-jet added to 52 ml of water for a total volume of 80 ml (8 injection sites of 10 ml each).

For multiple or asymmetrical trunks, measure the tree canopy at the drip line. The application rate is one 10ml injection per yard of canopy diameter.

Example: If the canopy diameter is 18 feet (6 yards), there will be 6 injection sites. Prepare a treatment solution with 21 ml PHOSPHO-jet (6 x 3.5 ml) added to 39 ml of water (6 x 6.5 ml) for a total volume of 60 ml (6 injection sites of 10 ml each).

Note: 324 ml (11 fl. oz) PHOSPHO-jet + 624 ml (21 fl. oz) water makes one quart of solution.

ARBORJET INJECTION PROCEDURES

General Guidelines:

Measure the tree diameter at chest height (54" from ground) in inches to find the Diameter at Breast Height (DBH). If measuring circumference, divide this number by three to determine Diameter at Breast Height (DBH).

Make applications to trees in full leaf. Alternatively, apply prior to bud break in spring or after leaf senescence (coloration or drop) in fall. Moist soil conditions and moderate temperatures (i.e., >40 and <90°F) favor transpiration and are optimal for injection uptake.

Drill injection sites into the trunk or root flare (i.e., buttress) area, generally 6-8" from the soil level and 6" apart around the circumference of the tree.

For Phytophthora (Sudden Oak Death, Phytophthora ramorum), inject every 6 inches around trunk circumference measured at 4 feet above the soil line.

Basic Arborjet Injection Procedures:

Drill 5/8" deep into the sapwood using the appropriate sized drill bit (7/32", 9/32" or 3/8" dia.). Drill at a 90 degree angle to the stem (i.e., straight into the sapwood). Avoid drilling into dead, dying or diseased tissue, or tissue with visible injury or cracks. Use clean and sharp drill bits. Initially apply no pressure to the drill; the bit will naturally cut through the bark. It will stop penetrating when it meets the harder sapwood. Next apply pressure to the drill to cut 5/8" into the sapwood.

Insert an Arborplug, and tap in using the set tool and mallet. Use the #3 (9/32" d) or #4 (3/8" d) Arborplug in hardwoods; in conifers, use the #4 Arborplug. Using the injection needle, pierce the internal septum to start the injection process. Shut off and remove the injection needle upon completion.

Resinous Conifers

In resinous conifers, such as pine and spruce insert the injection needle and open to start liquid flow immediately after inserting the Arborplug into the sapwood. A delay may reduce uptake due to resin flow.

Monocots

Inject into the trunk into lignified (hardened, woody) tissues typically within 2-3 ft. of the soil. Drill into the stem 4" deep using the 3/8" drill bit. Insert a #4 Arborplug™. Inject through the Arborplug. Only one injection site is needed.

WHEN TO TREAT/TIMING OF STEM INJECTION APPLICATIONS

Tree Health and Growing Conditions:

Best results are obtained when treatments are applied prior to infection. Treat trees when foliar symptoms (e.g., spot, defoliation, dieback) affect less than 10% of the canopy. Anticipate early season foliar infections, by treating prior to bud break (for example, apple scab).

Phytophthora root rot occurs most frequently in poorly drained and compacted soils. Susceptible species are at risk of infection following heavy precipitation or irrigation. Trees growing in low lying areas are also at risk of disease. Treat as early as possible in the infection cycle for best tree response.

For optimal uptake, apply when soil is moist, soil temperatures are above 45°F, ambient temperatures are between 40° to 90°F, and during the 24 hour period when transpiration is greatest, typically before 2:00 PM. Applications to drought or heat stressed trees may result in injury to tree tissue, poor treatment and subsequent control. Watering the trees prior to injection may enhance the uptake of PHOSPHO-jet.

COMPATIBILITY

PHOSPHO-jet is compatible with most products used in agriculture. However, individual crop sensitivity to these mixtures may vary. Mixtures of PHOSPHO-jet with copper products are not always compatible or cause phytotoxicity to some plants. If these combinations or others have not been used previously, do not tank mix without first testing the compatibility of the tank mix. Do not apply tank mixture without first assessing its safety to the crop (phytotoxicity). Tank mix PHOSPHO-jet with fertilizers only if crop safety has been established and the PHOSPHO-jet use rates are followed.

Due to PHOSPHO-jet's acidic nature, do not use acidifying-type compatibility agents. If adjuvants are used, test them before use to confirm compatibility with PHOSPHO-jet.

Use a jar test to confirm compatibility with PHOSPHO-jet. In a clean jar using the same water source that is normally used to fill spray tank add the appropriate quantity of water and mix thoroughly. Let stand for 3 minutes. If mixture remains in solution or is remixed readily, the tank mixture is compatible.

Spray the solution that results from the above compatibility test onto a few plants until foliage is visibly wet and inspect for visual effects of phytotoxicity (leaf burn) 3-7 days later.

RESTRICTIONS

- Do not inject trees more than once annually unless otherwise indicated.
- Not recommended for newly planted (non-established) trees.
- DO NOT inject drought stressed trees.
- Do not treat trees that are damaged by herbicides.
- Do not inject trees within two weeks of any other spray or soil chemical treatment.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE:

Keep this product in containers stored upright and secured with the original closure. Do not store this product near any heat source. Do not store near any strong oxidants. If transfer to another container becomes necessary, ensure that the container is clearly labeled, the container is a type suitable for the product and is clean and free of other materials. Keep from freezing.

PESTICIDE DISPOSAL:

Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL:

Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying.

For containers small enough to shake (≤ 5 gallons)

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsates for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

For containers too large to shake (> 5 gallons or 50 lbs.)

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Offer for recycling, if available.

NOTICE OF WARRANTY

ARBORJET, Inc. makes no warranty of fitness of this product for any other purpose, beyond its uses under normal conditions in keeping with the statements made on this label.

SUPPLEMENTAL LABEL

PHOSPHO-jet Application Rates for Micro-injection Devices

See product label for application rate information.

Air/Hydraulic Micro-Injection Application

To inject, set the primary regulator to 75 PSI, charge the Dose-Sizer by pulling back on Dose-Sizer knob after priming, and apply the specified dose equally into the preset Arborplug.

QUIK-jet Micro-Injection Application

To Micro-Inject, set the Arborjet Tree Micro-Injector to the 5 ml setting. Draw formulation into the injector cylinder and squeeze handle to deliver the shot. Repeat until the full dose per injection site is delivered.

PHOSPHO-jet APPLICATION RATES FOR ARBORJET MICRO-INFUSION™ (I.E. TREE I.V.) APPLICATIONS

Tree Size DBH"	# Injection sites	Rate ml/ DBH"	Treatment Solution	
			PHOSPHO-jet mL/tree size (avg.) (1 part)	Water (2 parts)
6-8"	4	5	35	70
9-11"	5	5	50	100
12-14"	7	5	65	130
15-17"	8	5	80	160
18-20"	10	5	95	190
21-23"	11	5	110	220
24-26"	13	7	175	350
27-29"	14	7	196	392
30-32"	16	7	217	434
33-35"	17	7	238	476
36-38"	19	7	259	518
39-41"	20	7	280	560
42-44"	22	7	301	602
45-47"	23	7	322	644
48-50"	25	9	471	882
51-53"	26	9	468	936
54-56"	28	9	476	990
57-59"	29	9	522	1044
60-62"	31	9	549	1098
63-65"	32	9	576	1152
66-68"	34	9	603	1206
69-71"	35	9	630	1260

CLEAN UP

IMPORTANT! It is critical to rinse the Arborjet Injection System thoroughly after use. Use CLEAN-jet or soap and water. Residues left in the device will corrode the internal components and void equipment warranty.

ARBORJET
Revolutionary Plant Health Solutions

REV 8/2012

BOOKLET

345
2

PHOSPHO-JET⁺

SYSTEMIC FUNGICIDE

Systemic fungicide for the suppression of various plant diseases including root rot in avocado and citrus, bud rot and nut fall in coconut, black spot, scab, fire blight in apple, anthracnose in mango, sycamore, and dogwood, *Phytophthora* (causative of Sudden Oak Death) in oak, and for effective control of *Phytophthora* and *Pythium* diseases associated with stem and Canker Blight, Beech Decline, and general tree declines in landscapes.

ACTIVE INGREDIENTS:

Mono- and di-potassium salts of Phosphorous Acid.....	45.8%
OTHER INGREDIENTS	54.2%
TOTAL.....	100.0%

Contains: 5.17lbs/gallon of the active ingredients, mono- and di-potassium salts of Phosphorous acid. Equivalent to 3.35 lbs Phosphorous acid/gallon

EPA Reg No. 74578-3

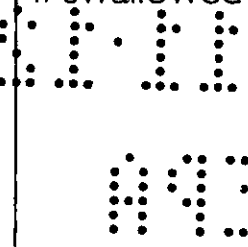
EPA Est. No. 74578-MA-001

Net Contents: See Individual Container

KEEP OUT OF REACH OF CHILDREN
CAUTION

843

77-77-60

FIRST AID	
<p>If swallowed</p> 	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by the poison control center or doctor. • Do not give anything by mouth to an unconscious person.
<p>If in eyes</p>	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or doctor for treatment advice.

<p>If on skin or clothing</p>	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or doctor for treatment advice.
<p>If inhaled</p>	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. • Call a poison control center or doctor for treatment advice.
<p>Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact the National Poison Control Hotline at 1-800-222-1222, 24 hours a day, 7 days a week.</p>	

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION. Harmful if swallowed, inhaled or absorbed through skin. Causes moderate eye irritation. Avoid breathing vapors or spray mist. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

USER SAFETY RECOMMENDATIONS:

Users should:

- Wash hands before drinking, eating, chewing gum, using tobacco, or using the toilet.
- Remove PPE clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Applicators and other handlers must wear protective eyewear, long pants and long-sleeved shirt, waterproof gloves, shoes plus socks.

Follow manufacturer's instructions for maintaining/cleaning personal protective equipment (PPE). If no such instructions for washables, use hot water and detergent. Keep and wash PPE separately from other laundry.

When handlers use closed systems, aircraft or enclosed cabs in a manner that meets the requirements listed in the worker protection standard (WPS) for agricultural pesticides (40 CFR 170.240 (d) (4-6)), the handler PPE requirements may be reduced or modified as specified in the WPS.

ENVIRONMENTAL HAZARDS:

For Terrestrial uses: Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Read entire label before using this product. Do not apply this product in any way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide registration.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Workers Protection Standard, CFR 40 part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours.

PPE required for early entry to treated areas that are permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soils or water, is: coveralls, waterproof gloves, shoes plus socks, and protective eyewear.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements of this box apply to uses of this product that are not within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

Do not enter treated areas without protective clothing until sprays have dried.

GENERAL APPLICATION INSTRUCTIONS

This product is for use with the **ARBORJET TREE INJECTION SYSTEMS** or those systems that meet the label and dosage requirements. Follow manufacturer's directions for use.

Micro-injection Applications for use as formulated

PHOSPHO-jet may be applied undiluted by micro-injection. The PHOSPHO-jet dose rate is 5 mL per inch DBH.

CALCULATING APPLICATION RATE

The dosages and number of application sites are based on tree diameter.

To determine the application/dose rate per tree:

- 1) Measure the tree diameter in inches at chest height (54" from ground) to find the Diameter at Breast Height (DBH). (If measuring tree circumference, divide circumference by 3 to obtain the DBH in inches.)
- 2) Calculate the number of injection sites by dividing the DBH in inches by 2.
- 3) Multiply the tree DBH by the dosage rate (5 mL per inch DBH) to calculate the total dose in milliliters per tree.
- 4) Divide the total dose by the number of injection sites to determine required dosage per injection site.

Example: For a tree with a DBH of 12 inches (or circumference of 36 inches) and 5 mL dosage rate:

- 1) $DBH = 12''$ (circumference $36'' \div 3 = 12''$)
- 2) Divide DBH of 12" by 2 = 6 injection sites.

- 3) Multiply DBH" of 12 by 5 mL = 60 mL total dose per tree.
- 4) Divide 60 mL by 6 injection sites = 10 mL per injection site to deliver the required dosage.

Ornamental, Forest, Conifers, and Crop Trees

CALCULATING APPLICATION RATE AND MIXING INSTRUCTIONS

(for micro-injection; for other methods see supplemental information)

- 1) To determine the application rate, refer to Table 1 [reverse side]. Identify plant size by determining tree diameter in inches at breast height (DBH") (measured at approximately 54" above the soil line). (If measuring tree circumference divide by 3 to obtain the DBH".)
- 2) Multiply the DBH" by the corresponding amount in the rate column to determine the application rate appropriate for plant size.
- 3) 1 part PHOSPHO-jet is diluted with 2 parts water. Determine the amount of water to be added by multiplying the ml PHOSPHO-jet (obtained in step #2 above) by 2.
- 4) Fill the tank with the water before adding PHOSPHO-jet.
- 5) Add PHOSPHO-jet slowly to the tank, close and gently agitate to mix.

Example: To treat a 10" DBH oak for root rot, see Table 1. Add 50 ml of PHOSPHO-jet (10" DBH \times 5ml) into 100 ml (2 \times 50 ml) water for a total injection volume of 150 ml. Inject 30 ml of the PHOSPHO-jet/water solution every 6" of trunk circumference as directed in Supplemental Label Arborjet Injection Procedures.

TABLE I PHOSPHO-JET USE & APPLICATION RATES

Plant	Disease	Plant Size (DBH")	Rate (ml/ DBH")
Ornamental & Forest Trees	Root Rot (Phytophthora spp. including P. ramorum, P. cinnamomi, P. palmivora, P. cactorum), Anthracnose, Apple scab (Venturia inaequalis)	<12-23" 24-47" 48"+	5 7 9
Conifers, grown in commercial nurseries, plantations, and forest (including Christmas tree farms)	Root Rot (Phytophthora spp. including P. ramorum, P. cinnamomi)		
Crop Trees	Disease	Plant Size (DBH")	Rate (ml/ DBH")
Avocados	Root Rot (Phytophthora cinnamomi, P. citricola)	<12-23" 24-27" 48"+	5 7 9
Citrus (mature trees)	Root, Foot and Collar Rot (Phytophthora spp. including P. nicotinae, P. citrophthora)		
Coconuts	Bud – Nut Fall (Phytophthora palmivora)		
Apples, Pears, Loquats, Quince	Fire Blight (Erwinia amylovora); Apple Scab (Venturia inaequalis); Black Spot (Diplocarpon rosae)		
Tree nuts such as Almonds, Walnuts	Root and Collar Rot (Phytophthora spp.)		

SUDDEN OAK DEATH*

Use PHOSPHO-jet for effective control of Phytophthora (Sudden Oak Death, *Phytophthora ramorum*), in landscapes, plantation trees, golf courses, forests and parks. Apply PHOSPHO-jet to Oaks (Black, Canyon, Coast, Live, Shreve) and Tan Oak.

Make applications before disease development and in conjunction with good cultural management practices. Do not exceed indicated application rates or apply more frequently than stated on label or tree injury may occur. Do not apply to trees that are heat or moisture stressed.

PHOSPHO-JET APPLICATION FOR OAKS		
Landscape, Golf Course, Plantation, Forest, and Park Applications	Disease	Rate
Oak (<i>Quercus</i> spp.) including Black, Canyon, Coast, Live, Shreve; Tan Oak	Sudden oak death <i>Phytophthora</i> <i>ramorum</i>	10 ml per 6 inch circumfer- ence (3.5 ml PHOSPHO-jet and 6.5 ml water)

CALCULATING APPLICATION RATE AND MIXING INSTRUCTIONS

The dilution rate is 1 part PHOSPHO-jet to 2 parts water. One injection of 10 ml of the PHOSPHO-jet /water solution is used per 6 inches of trunk circumference measured at 4 feet above the soil line.

In order to determine the application rate per tree:

- 1) Measure the trunk circumference 4 feet above the soil line.
- 2) Divide the number of inches of circumference by 6 to determine the number of injection sites.

[continued on next page]

3) Each 10 ml solution injection will have 3.5 ml PHOSPHO-jet and 6.5 ml water.

4) Multiply the number of injection sites by 3.5 to determine the amount of PHOSPHO-jet needed.

5) Multiply the number of injection sites by 6.5 to determine the amount of water needed.

6) Fill the tank with the water before adding PHOSPHO-jet.

7) Add PHOSPHO-jet slowly to the tank to reach the total amount of solution desired. (Total volume should equal number of injection sites \times 10 ml.) Close and gently agitate to mix.

Example: A trunk has a circumference of 48". Dividing by 6 = 8 injection sites. Multiplying 8 by 3.5 = 28 ml PHOSPHO-jet. Multiplying 8 by 6.5 = 52 ml water. Therefore, prepare a treatment solution with 28 ml PHOSPHO-jet added to 52 ml of water for a total volume of 80 ml (8 injection sites of 10 ml each).

For multiple or asymmetrical trunks, measure the tree canopy at the drip line. The application rate is one 10 ml injection per yard of canopy diameter.

Example: If the canopy diameter is 18 feet (6 yards), there will be 6 injection sites. Prepare a treatment solution with 21 ml PHOSPHO-jet (6×3.5 ml) added to 39 ml of water (6×6.5 ml) for a total volume of 60 ml (6 injection sites of 10 ml each).

Note: 324 ml (11 fl. oz) PHOSPHO-jet + 624 ml (21 fl. oz) water makes one quart of solution.

ARBORJET INJECTION PROCEDURES

GENERAL GUIDELINES:

Measure the tree diameter at chest height (54" from ground) in inches to find the Diameter at Breast Height (DBH). If measuring circumference, divide this number by three to determine Diameter at Breast Height (DBH).

Make applications to trees in full leaf. Alternatively, apply prior to bud break in spring or after leaf senescence (coloration or drop) in fall. Moist soil conditions and

moderate temperatures (i.e., >40 and <90°F) favor transpiration and are optimal for injection uptake.

Drill injection sites into the trunk or root flare (i.e., buttress) area, generally 6-8" from the soil level and 6" apart around the circumference of the tree.

For Phytophthora (Sudden Oak Death, Phytophthora ramorum), inject every 6 inches around trunk circumference measured at 4 feet above the soil line.

BASIC ARBORJET INJECTION PROCEDURES:

Drill 5/8" deep into the sapwood using the appropriate sized drill bit (7/32", 9/32" or 3/8" dia.). Drill at a 90 degree angle to the stem (i.e., straight into the sapwood). Avoid drilling into dead, dying or diseased tissue, or tissue with visible injury or cracks. Use clean and sharp drill bits. Initially apply no pressure to the drill; the bit will naturally cut through the bark. It will stop penetrating when it meets the harder sapwood. Next apply pressure to the drill to cut 5/8" into the sapwood.

Insert an Arborplug, and tap in using the set tool and mallet. Use the #3 (9/32" d) or #4 (3/8" d) Arborplug in hardwoods; in conifers, use the #4 Arborplug. Using the injection needle, pierce the internal septum to start the injection process. Shut off and remove the injection needle upon completion.

RESINOUS CONIFERS

In resinous conifers, such as pine and spruce insert the injection needle and open to start liquid flow immediately after inserting the Arborplug into the sapwood. A delay may reduce uptake due to resin flow.

MONOCOTS

Inject into the trunk into lignified (hardened, woody) tissues typically within 2-3 ft. of the soil. Drill into the stem 4" deep using the 3/8" drill bit. Insert a #4 Arborplug™. Inject through the Arborplug. Only one injection site is needed.

[continued on next page]

WHEN TO TREAT / TIMING OF STEM INJECTION APPLICATIONS

Tree Health and Growing Conditions:

Best results are obtained when treatments are applied prior to infection. Treat trees when foliar symptoms (e.g., spot, defoliation, dieback) affect less than 10% of the canopy. Anticipate early season foliar infections, by treating prior to bud break (for example, apple scab).

Phytophthora root rot occurs most frequently in poorly drained and compacted soils. Susceptible species are at risk of infection following heavy precipitation or irrigation. Trees growing in low lying areas are also at risk of disease. Treat as early as possible in the infection cycle for best tree response.

For optimal uptake, apply when soil is moist, soil temperatures are above 45°F, ambient temperatures are between 40° to 90°F, and during the 24-hour period when transpiration is greatest, typically before 2:00 PM.

Applications to drought or heat stressed trees may result in injury to

tree tissue, poor treatment and subsequent control. Watering the trees prior to injection may enhance the uptake of PHOSPHO-jet.

COMPATIBILITY

PHOSPHO-jet is compatible with most products used in agriculture. However, individual crop sensitivity to these mixtures may vary. Mixtures of PHOSPHO-jet with copper products are not always compatible or cause phytotoxicity to some plants. If these combinations or others have not been used previously, do not tank mix without first testing the compatibility of the tank mix. Do not apply tank mixture without first assessing its safety to the crop (phytotoxicity). Tank mix PHOSPHO-jet with fertilizers only if crop safety has been established and the PHOSPHO-jet use rates are followed.

Due to PHOSPHO-jet's acidic nature, do not use acidifying-type compatibility agents. If adjuvants are used, test them before use to confirm compatibility with PHOSPHO-jet.

Use a jar test to confirm compatibility with PHOSPHO-jet. In a clean jar using

the same water source that is normally used to fill spray tank, add the appropriate quantity of water and mix thoroughly. Let stand for 3 minutes. If mixture remains in solution or is remixed readily, the tank mixture is compatible.

Spray the solution that results from the above compatibility test onto a few plants until foliage is visibly wet and inspect for visual effects of phytotoxicity (leaf burn) 3-7 days later.

RESTRICTIONS

- DO NOT inject trees more than once annually unless otherwise indicated.
- Not recommended for newly planted (non-established) trees.
- DO NOT inject drought stressed trees.
- DO NOT treat trees that are damaged by herbicides.
- DO NOT inject trees within two weeks of any other spray or soil chemical treatment.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE:

Keep this product in containers stored upright and secured with the original closure. Do not store this product near any heat source. Do not store near any strong oxidants. If transfer to another container becomes necessary, ensure that the container is clearly labeled, the container is a type suitable for the product, and is clean and free of other materials. Keep from freezing.

PESTICIDE DISPOSAL:

Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL:

Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying.

For containers small enough to shake (≤ 5 gallons)

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for

[continued on next page]

10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsates into application equipment or a mix tank or store rinsates for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

For containers too large to shake (> 5 gallons or 50 lbs.)

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Offer for recycling, if available.

NOTICE OF WARRANTY

ARBORJET, Inc makes no warranty of fitness of this product for any other purpose, beyond its uses under normal conditions in keeping with the statements made on this label.

SUPPLEMENTAL LABEL

PHOSPHO-jet Application Rates for Micro-injection Devices

See product label for application rate information.

Air/Hydraulic Micro-Injection Application

To inject, set the primary regulator to 75 PSI, charge the Dose-Sizer by pulling back on Dose-Sizer knob after priming, and apply the specified dose equally into the preset Arborplug.

QUICK-jet Micro-Injection Application

To Micro-Inject, set the Arborjet Tree Micro-Injector to the 5 ml setting. Draw formulation into the injector cylinder and squeeze handle to deliver the shot. Repeat until the full dose per injection site is delivered.

**PHOSPHO-JET APPLICATION RATES
FOR ARBORJET MICRO-INFUSION™ (i.e., TREE I.V.) APPLICATIONS**

Tree Size DBH"	# Injection sites	Rate mL/ DBH"	Treatment Solution	
			PHOSPHO-jet mLs/tree size (avg.) (1 part)	Water (2 parts)
6-8"	4	5	35	70
9-11"	5	5	50	100
12-14"	7	5	65	130
15-17"	8	5	80	160
18-20"	10	5	95	190
21-23"	11	5	110	220
24-26"	13	7	175	350
27-29"	14	7	196	392
30-32"	16	7	217	434
33-35"	17	7	238	476
36-38"	19	7	259	518
39-41"	20	7	280	560
42-44"	22	7	301	602
45-47"	23	7	322	644
48-50"	25	9	441	882
51-53"	26	9	468	936
54-56"	28	9	495	990
57-59"	29	9	522	1044
60-62"	31	9	549	1098
63-65"	32	9	576	1152
66-68"	34	9	603	1206
69-71"	35	9	630	1260

CLEAN-UP

IMPORTANT! It is critical to rinse the Arborjet Injection System thoroughly after use. Use **CLEAN-jet** or soap and water. Residues left in the device will corrode the internal components and void equipment warranty.

NOTES



Manufactured by: ARBORJET, INC.

781-935-9070

99 Blueberry Hill Road

Woburn, MA 01801

843

27-77-60

REV 7/2012

ARBORCULTURE IN MOTION®

PHOSPHO-JET

SYSTEMIC FUNGICIDE

Systemic fungicide for the suppression of various plant diseases including root rot in avocado and citrus, bud rot and nut fall in coconut, black spot, scab, fire blight in apple, anthracnose in mango, sycamore, and dogwood, *Phytophthora* (causative of Sudden Oak Death) in oak, and for effective control of *Phytophthora* and *Pythium* diseases associated with stem and Canker Blight, Beech Decline, and general tree declines in landscapes.

ACTIVE INGREDIENT:

Mono- & di-potassium salts of Phosphorous Acid.. 45.8%

OTHER INGREDIENTS.....54.2%

TOTAL..... 100.0%

Contains: 5.17lbs/gallon of the active ingredients, mono- and di-potassium salts of Phosphorous acid.

Equivalent to 3.35 lbs Phosphorous acid/gallon.

EPA Reg No. 74578-3 • EPA Est. No. 74578-MA-001

Net Contents: 1.057 Quarts (1 Liter)

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

FIRST AID

IF SWALLOWED

- Call a poison control center or doctor immediately for treatment advice.
- Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to do so by a poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

IF IN EYES

- Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
- Call a poison control center or a doctor for treatment advice.

IF ON SKIN OR CLOTHING

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or a doctor for treatment advice.

IF INHALED

- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferable mouth-to-mouth, if possible.
- Call a poison control center or a doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact the National Poison Control Hotline at 1-800-222-1222, 24 hours a day, 7 days a week.

Manufactured by: ARBORJET, Inc.

99 Blueberry Hill Road, Woburn, MA 01801 781-935-9070

ARBORJET
Revolutionary Plant Health Solutions

8/13/12

DIRECTIONS FOR USE:

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Read entire label before using this product. Do not apply this product in any way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide registration.

See booklet for complete directions for use.

RESTRICTIONS:

- Do not inject trees more than once annually unless otherwise indicated.
- Not recommended for newly planted (non-established) trees.
- DO NOT inject drought stressed trees.
- Do not treat trees that are damaged by herbicides.
- Do not inject trees within two weeks of any other spray or soil chemical treatment.

PRECAUTIONARY STATEMENTS:

HAZARDS TO HUMANS AND DOMESTIC ANIMALS. CAUTION. Harmful if swallowed, inhaled or absorbed through skin. Causes moderate eye irritation. Avoid breathing vapors or spray mist. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

See booklet for other precautions and Storage and Disposal.

STORAGE AND DISPOSAL:

See attached leaflet for storage and disposal.



8 11890 01141 6

Arboriculture in Motion® is a registered trademark of Arborjet, Inc. REV 7/2012

INSERT

2000
2000

PHOSPHO-JET

SYSTEMIC FUNGICIDE

Systemic fungicide for the suppression of various plant diseases including root rot in avocado and citrus, bud rot and nut fall in coconut, black spot, scab, fire blight in apple, anthracnose in mango, sycamore, and dogwood, Phytophthora (causative of Sudden Oak Death) in oak, and for effective control of Phytophthora and Pythium diseases associated with stem and Canker Blight, Beech Decline, and general tree declines in landscapes.

ACTIVE INGREDIENT:

Mono- and di-potassium salts of Phosphorous Acid	45.8%
OTHER INGREDIENTS	54.2%
TOTAL	100.0%

Contains: 5.17 lbs/gallon of the active ingredients, mono- and di-potassium salts of Phosphorous acid. Equivalent to 3.35 lbs Phosphorous acid/gallon.

EPA Reg No. 74578-3 • EPA Est. No. 74578-MA-001

Net Contents: 1.057 Quarts (1 Liter)

KEEP OUT OF REACH OF CHILDREN CAUTION

Manufactured by: ARBORJET, Inc., 99 Blueberry Hill Road, Woburn, MA 01801 781-935-9070

FIRST AID

IF SWALLOWED:

- Call a poison control center or doctor immediately for treatment advice.
- Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to do so by a poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

IF IN EYES:

- Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
- Call a poison control center or a doctor for treatment advice.

IF ON SKIN OR CLOTHING:

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or a doctor for treatment advice.

IF INHALED:

- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferable mouth-to-mouth, if possible.
- Call a poison control center or a doctor for treatment advice.

Have the product container of label with you when calling a poison control center or doctor or going for treatment. You may also contact the National Poison Control Hotline at 1-800-222-1222, 24 hours a day, 7 days a week.

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION: Harmful if swallowed, inhaled or absorbed through skin. Causes moderate eye irritation. Avoid breathing vapors or spray mist. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Applicators and other handlers must wear protective eyewear, long pants and long-sleeved shirt, waterproof gloves, shoes plus socks.

Follow manufacturer's instructions for maintaining/cleaning personal protective equipment (PPE). If no such instructions for washables, use hot water and detergent. Keep and wash PPE separately from other laundry.

When handlers use closed systems, aircraft or enclosed cabs in a manner that meets the requirements listed in the worker protection standard (WPS) for agricultural pesticides (40 CFR 170.240 (d) (4-6), the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS:

Users should:

- Wash hands before drinking, eating, chewing gum, using tobacco, or using the toilet.
- Remove PPE clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS:

For Terrestrial uses: Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Read entire label before using this product.

Do not apply this product in any way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide registration.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, CFR 40 part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours.

PPE required for early entry to treated areas that are permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soils or water, is: coveralls, waterproof gloves, shoes plus socks, and protective eyewear.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements of this box apply to uses of this product that are not within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

Do not enter treated areas without protective clothing until sprays have dried.

GENERAL APPLICATION INSTRUCTIONS

This product is for use with the ARBORJET TREE INJECTION SYSTEMS or those systems that meet the label and dosage requirements. Follow manufacturer's directions for use.

MICRO-INJECTION APPLICATIONS FOR USE AS FORMULATED

PHOSPHO-JET may be applied undiluted by micro-injection. The PHOSPHO-JET dose rate is 5 mL per inch DBH.

Calculating Application Rate

The dosages and number of application sites are based on tree diameter.

To determine the application/dose rate per tree:

- 1) Measure the tree diameter in inches at chest height (54" from ground) to find the Diameter at Breast Height (DBH). (If measuring tree circumference, divide circumference by 3 to obtain the DBH in inches.)
 - 2) Calculate the number of injection sites by dividing the DBH in inches by 2.
 - 3) Multiply the tree DBH by the dosage rate (5 mL per inch DBH) to calculate the total dose in milliliters per tree.
 - 4) Divide the total dose by the number of injection sites to determine required dosage per injection site.
- Example: For a tree with a DBH of 12 inches (or circumference of 36 inches) and 5 mL dosage rate:
- 1) DBH = 12" (circumference 36" ÷ 3 = 12")
 - 2) Divide DBH of 12" by 2 = 6 injection sites.
 - 3) Multiply DBH of 12 by 5 mL = 60 mL total dose per tree.
 - 4) Divide 60 mL by 6 injection sites = 10 mL per injection site to deliver the required dosage.

Ornamental, Forest, Conifers, and Crop Trees

CALCULATING APPLICATION RATE AND MIXING INSTRUCTIONS (for micro-injection; for other methods see supplemental information)

- 1) To determine the application rate, refer to Table 1. Identify plant size by determining tree diameter in inches at breast height (DBH) (measured at approximately 54" above the soil line). (If measuring tree circumference divide by 3 to obtain the DBH.)
- 2) Multiply the DBH by the corresponding amount in the rate column to determine the application rate appropriate for plant size.
- 3) 1 part PHOSPHO-JET is diluted with 2 parts water. Determine the amount of water to be added by multiplying the mL PHOSPHO-JET (obtained in step #2 above) by 2.
- 4) Fill the tank with the water before adding PHOSPHO-JET.
- 5) Add PHOSPHO-JET slowly to the tank, close and gently agitate to mix.

Example: To treat a 10" DBH oak for root rot, refer to Table 1. Add 50 mL of PHOSPHO-JET (10" DBH x 5 mL) into 100 mL (2 x 50 mL) water for a total injection volume of 150 mL. Inject 30 mL of the PHOSPHO-JET/water solution every 6" of trunk circumference as directed in Supplemental Label Arborjet Injection Procedures.

TABLE 1: PHOSPHO-JET USE AND APPLICATION RATES

Plant	Disease	Plant Size (DBH")	Rate (mL/DBH")
Ornamental & Forest Trees	Root Rot (Phytophthora spp. including P. ramorum, P. cinnamomi, P. palmivora, P. cactorum), Anthracnose, Apple scab (Venturia inaequalis)	<12-23"	5
		24-47"	7
		48"+	9
Conifers, grown in commercial nurseries, plantations, and forest (including Christmas tree farms)	Root Rot (Phytophthora spp. including P. ramorum, P. cinnamomi)		
Crop Trees	Disease	Plant Size (DBH")	Rate (mL/DBH")
Avocados	Root Rot (Phytophthora cinnamomi, P. citricola)		
Citrus (mature trees)	Root, Foot and Collar Rot (Phytophthora spp. including P. nicotianae, P. citrophthora)	<12-23"	5
Coconuts	Bud - Nut Fall (Phytophthora palmivora)	24-27"	7
		48"+	9
Apples, Pears, Quinces	Fire Blight (Erwinia amylovora); Apple Scab (Venturia inaequalis); Black Spot (Diplocarpon rosae)		
Tree nuts such as Almonds, Walnuts	Root and Collar Rot (Phytophthora spp.)		

SUDDEN OAK DEATH*

Use PHOSPHO-JET for effective control of Phytophthora (Sudden Oak Death, Phytophthora ramorum), in landscapes, plantation trees, golf courses, forests and parks. Apply PHOSPHO-JET to Oaks (Black, Canyon, Coast Live, Shreve) and Tan Oak.

Make applications before disease development and in conjunction with good cultural management practices. Do not exceed indicated application rates or apply more frequently than stated on label or tree injury may occur. Do not apply to trees that are heat or moisture stressed.

PHOSPHO-JET APPLICATION FOR OAKS

Landscape, Golf Course, Plantation, Forest, and Park Applications	Disease	Rate
Oak (Quercus spp.) including Black, Canyon, Coast Live, Shreve, Tan Oak	Sudden oak death Phytophthora ramorum	10 mL per 6 inch circumference (3.5 mL PHOSPHO-JET and 6.5 mL water)

[CONTINUED]

CALCULATING APPLICATION RATES & MIXING INSTRUCTIONS

The dilution rate is 1 part PHOSPHO-jet to 2 parts water. One injection of 10 ml of the PHOSPHO-jet / water solution is used per 6 inches of trunk circumference measured at 4 feet above the soil line.

In order to determine the application rate per tree:

- 1) Measure the trunk circumference 4 feet above the soil line.
- 2) Divide the number of inches of circumference by 6 to determine the number of injection sites.
- 3) Each 10 ml solution injection will have 3.5 ml PHOSPHO-jet and 6.5 ml water.
- 4) Multiply the number of injection sites by 3.5 to determine the amount of PHOSPHO-jet needed.
- 5) Multiply the number of injection sites by 6.5 to determine the amount of water needed.
- 6) Fill the tank with the water before adding PHOSPHO-jet.
- 7) Add PHOSPHO-jet slowly to the tank to reach the total amount of solution desired. (Total volume should equal number of injection sites x 10 ml.) Close and gently agitate to mix.

Example: A trunk has a circumference of 48". Dividing by 6 = 8 injection sites. Multiplying 8 by 3.5 = 28 ml PHOSPHO-jet. Multiplying 8 by 6.5 = 52 ml water. Therefore, prepare a treatment solution with 28 ml PHOSPHO-jet added to 52 ml of water for a total volume of 80 ml (8 injection sites of 10 ml each).

For multiple or asymmetrical trunks, measure the tree canopy at the drip line. The application rate is one 10ml injection per yard of canopy diameter.

Example: If the canopy diameter is 18 feet (6 yards), there will be 6 injection sites. Prepare a treatment solution with 21 ml PHOSPHO-jet (6 x 3.5 ml) added to 39 ml of water (6 x 6.5 ml) for a total volume of 60 ml (6 injection sites of 10 ml each).

Note: 324 ml (11 fl. oz) PHOSPHO-jet + 624 ml (21 fl. oz) water makes one quart of solution.

ARBORJET INJECTION PROCEDURES

General Guidelines:

Measure the tree diameter at chest height (54" from ground) in inches to find the Diameter at Breast Height (DBH). If measuring circumference, divide this number by three to determine Diameter at Breast Height (DBH).

Make applications to trees in full leaf. Alternatively, apply prior to bud break in spring or after leaf senescence (coloration or drop) in fall. Moist soil conditions and moderate temperatures (i.e., >40 and <90°F) favor transpiration and are optimal for injection uptake.

Drill injection sites into the trunk or root flare (i.e., buttress) area, generally 6-8" from the soil level and 6" apart around the circumference of the tree.

For Phytophthora (Sudden Oak Death, Phytophthora ramorum), inject every 6 inches around trunk circumference measured at 4 feet above the soil line.

Basic Arborjet Injection Procedures:

Drill 5/8" deep into the sapwood using the appropriate sized drill bit (7/32", 9/32" or 3/8" dia.). Drill at a 90 degree angle to the stem (i.e., straight into the sapwood). Avoid drilling into dead, dying or diseased tissue, or tissue with visible injury or cracks. Use clean and sharp drill bits. Initially apply no pressure to the drill; the bit will naturally cut through the bark. It will stop penetrating when it meets the harder sapwood. Next apply pressure to the drill to cut 5/8" into the sapwood.

Insert an Arborplug, and tap in using the set tool and mallet. Use the #3 (9/32" d) or #4 (3/8" d) Arborplug in hardwoods; in conifers, use the #4 Arborplug. Using the injection needle, pierce the internal septum to start the injection process. Shut off and remove the injection needle upon completion.

Resinous Conifers

In resinous conifers, such as pine and spruce insert the injection needle and open to start liquid flow immediately after inserting the Arborplug into the sapwood. A delay may reduce uptake due to resin flow.

Monocots

Inject into the trunk into lignified (hardened, woody) tissues typically within 2-3 ft. of the soil. Drill into the stem 4" deep using the 3/8" drill bit. Insert a #4 Arborplug™. Inject through the Arborplug. Only one injection site is needed.

WHEN TO TREAT/TIMING OF STEM INJECTION APPLICATIONS

Tree Health and Growing Conditions:

Best results are obtained when treatments are applied prior to infection. Treat trees when foliar symptoms (e.g., spot, defoliation, dieback) affect less than 10% of the canopy. Anticipate early season foliar infections, by treating prior to bud break (for example, apple scab).

Phytophthora root rot occurs most frequently in poorly drained and compacted soils. Susceptible species are at risk of infection following heavy precipitation or irrigation. Trees growing in low lying areas are also at risk of disease. Treat as early as possible in the infection cycle for best tree response.

For optimal uptake, apply when soil is moist, soil temperatures are above 45°F, ambient temperatures are between 40° to 90°F, and during the 24 hour period when transpiration is greatest, typically before 2:00 PM. Applications to drought or heat stressed trees may result in injury to tree tissue, poor treatment and subsequent control. Watering the trees prior to injection may enhance the uptake of PHOSPHO-jet.

COMPATIBILITY

PHOSPHO-jet is compatible with most products used in agriculture. However, individual crop sensitivity to these mixtures may vary. Mixtures of PHOSPHO-jet with copper products are not always compatible or cause phytotoxicity to some plants. If these combinations or others have not been used previously, do not tank mix without first testing the compatibility of the tank mix. Do not apply tank mixture without first assessing its safety to the crop (phytotoxicity). Tank mix PHOSPHO-jet with fertilizers only if crop safety has been established and the PHOSPHO-jet use rates are followed.

Due to PHOSPHO-jet's acidic nature, do not use acidifying-type compatibility agents. If adjuvants are used, test them before use to confirm compatibility with PHOSPHO-jet.

Use a jar test to confirm compatibility with PHOSPHO-jet. In a clean jar using the same water source that is normally used to fill spray tank, add the appropriate quantity of water and mix thoroughly. Let stand for 3 minutes. If mixture remains in solution or is removed readily, the tank mixture is compatible.

Spray the solution that results from the above compatibility test onto a few plants until foliage is visibly wet and inspect for visual effects of phytotoxicity (leaf burn) 3-7 days later.

RESTRICTIONS

- Do not inject trees more than once annually unless otherwise indicated.
- Not recommended for newly planted (non-established) trees.
- DO NOT inject drought stressed trees.
- Do not treat trees that are damaged by herbicides.
- Do not inject trees within two weeks of any other spray or soil chemical treatment.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE:

Keep this product in containers stored upright and secured with the original closure. Do not store this product near any heat source. Do not store near any strong oxidants. If transfer to another container becomes necessary, ensure that the container is clearly labeled, the container is a type suitable for the product, and is clean and free of other materials. Keep from freezing.

PESTICIDE DISPOSAL:

Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL:

Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying.

For containers small enough to shake (< 5 gallons)

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

For containers too large to shake (> 5 gallons or 50 lbs.)

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Offer for recycling, if available.

NOTICE OF WARRANTY

ARBORJET, Inc. makes no warranty of fitness of this product for any other purpose, beyond its uses under normal conditions in keeping with the statements made on this label.

SUPPLEMENTAL LABEL

PHOSPHO-jet Application Rates for Micro-Injection Devices

See product label for application rate information.

Air/Hydraulic Micro-Injection Application

To inject, set the primary regulator to 75 PSI, charge the Dose-Sizer by pulling back on Dose-Sizer knob after priming, and apply the specified dose equally into the preset Arborplug.

QUIK-jet Micro-Injection Application

To Micro-Inject, set the Arborjet Tree Micro-Injector to the 5 ml setting. Draw formulation into the injector cylinder and squeeze handle to deliver the shot. Repeat until the full dose per injection site is delivered.

PHOSPHO-JET APPLICATION RATES FOR ARBORJET MICRO-INFUSION™ (I.E., TREE I.V.) APPLICATIONS

Tree Size DBH"	# Injection sites	Rate ml/ DBH"	Treatment Solution	
			PHOSPHO-jet mLs/tree size (avg.) (1 part)	Water (2 parts)
6-8"	4	5	35	70
9-11"	5	5	50	100
12-14"	7	5	65	130
15-17"	8	5	80	160
18-20"	10	5	95	190
21-23"	11	5	110	220
24-26"	13	7	175	350
27-29"	14	7	196	392
30-32"	16	7	217	434
33-35"	17	7	238	476
36-38"	19	7	259	518
39-41"	20	7	280	560
42-44"	22	7	301	602
45-47"	23	7	322	644
48-50"	25	9	448	882
51-53"	26	9	468	936
54-56"	28	9	498	990
57-59"	29	9	522	1044
60-62"	31	9	549	1098
63-65"	32	9	576	1152
66-68"	34	9	603	1206
69-71"	35	9	630	1260

CLEAN-UP

IMPORTANT! It is critical to rinse the Arborjet Injection System thoroughly after use. Use CLEAN-jet or soap and water. Residues left in the device will corrode the internal components and void equipment warranty.

ARBORJET
Revolutionary Plant Health Solutions

REV 8/2012

BOOKLET

845
9

PHOSPHO-JET

SYSTEMIC FUNGICIDE

Systemic fungicide for the suppression of various plant diseases including root rot in avocado and citrus, bud rot and nut fall in coconut, black spot, scab, fire blight in apple, anthracnose in mango, sycamore, and dogwood, *Phytophthora* (causative of Sudden Oak Death) in oak, and for effective control of *Phytophthora* and *Pythium* diseases associated with stem and Canker Blight, Beech Decline, and general tree declines in landscapes.

ACTIVE INGREDIENTS:

Mono-and di-potassium salts of Phosphorous Acid.....	45.8%
OTHER INGREDIENTS	54.2%
TOTAL.....	100.0%

Contains: 5.17lbs/gallon of the active ingredients, mono- and di-potassium salts of Phosphorous acid. Equivalent to 3.35 lbs Phosphorous acid/gallon

EPA Reg No. 74578-3

EPA Est. No. 74578-MA-001

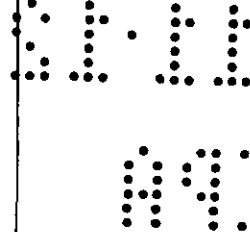
Net Contents: See Individual Container

KEEP OUT OF REACH OF CHILDREN
CAUTION

W.D.
Z.T.T.O.

FIRST AID

If swallowed



- Call a poison control center or doctor immediately for treatment advice.
- Have person sip a glass of water if able to swallow.
- Do not induce vomiting unless told to do so by the poison control center or doctor.
- Do not give anything by mouth to an unconscious person.

If in eyes

- Hold eye open and rinse slowly and gently with water for 15-20 minutes.
- Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
- Call a poison control center or doctor for treatment advice.

If on skin
or clothing

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or doctor for treatment advice.

If inhaled

- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.
- Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact the National Poison Control Hotline at 1-800-222-1222, 24 hours a day, 7 days a week.

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION. Harmful if swallowed, inhaled or absorbed through skin. Causes moderate eye irritation. Avoid breathing vapors or spray mist. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

USER SAFETY RECOMMENDATIONS:

Users should:

- Wash hands before drinking, eating, chewing gum, using tobacco, or using the toilet.
- Remove PPE clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

PERSONAL PROTECTIVE EQUIPMENT (PPE):

Applicators and other handlers must wear protective eyewear, long pants and long-sleeved shirt, waterproof gloves, shoes plus socks.

Follow manufacturer's instructions for maintaining/cleaning personal protective equipment (PPE). If no such instructions for washables, use hot water and detergent. Keep and wash PPE separately from other laundry.

When handlers use closed systems, aircraft or enclosed cabs in a manner that meets the requirements listed in the worker protection standard (WPS) for agricultural pesticides (40 CFR 170.240 (d) (4-6)), the handler PPE requirements may be reduced or modified as specified in the WPS.

ENVIRONMENTAL HAZARDS:

For Terrestrial uses: Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Read entire label before using this product. Do not apply this product in any way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide registration.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Workers Protection Standard, CFR 40 part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours.

PPE required for early entry to treated areas that are permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soils or water, is: coveralls, waterproof gloves, shoes plus socks, and protective eyewear.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements of this box apply to uses of this product that are not within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

Do not enter treated areas without protective clothing until sprays have dried.

GENERAL APPLICATION INSTRUCTIONS

This product is for use with the **ARBORJET TREE INJECTION SYSTEMS** or those systems that meet the label and dosage requirements. Follow manufacturer's directions for use.

Micro-injection Applications for use as formulated:

PHOSPHO-jet may be applied undiluted by micro-injection. The PHOSPHO-jet dose rate is 5 mL per inch DBH.

CALCULATING APPLICATION RATE

The dosages and number of application sites are based on tree diameter.

To determine the application/dose rate per tree:

- 1) Measure the tree diameter in inches at chest height (54" from ground) to find the Diameter at Breast Height (DBH). (If measuring tree circumference, divide circumference by 3 to obtain the DBH in inches.)
- 2) Calculate the number of injection sites by dividing the DBH in inches by 2.
- 3) Multiply the tree DBH by the dosage rate (5 mL per inch DBH) to calculate the total dose in milliliters per tree.
- 4) Divide the total dose by the number of injection sites to determine required dosage per injection site.

Example: For a tree with a DBH of 12 inches (or circumference of 36 inches) and 5 mL dosage rate:

- 1) $DBH = 12''$ (circumference $36'' \div 3 = 12''$)
- 2) Divide DBH of 12" by 2 = 6 injection sites.

- 3) Multiply DBH" of 12 by 5 mL = 60 mL total dose per tree.
- 4) Divide 60 mL by 6 injection sites = 10 mL per injection site to deliver the required dosage.

Ornamental, Forest, Conifers, and Crop Trees

CALCULATING APPLICATION RATE AND MIXING INSTRUCTIONS

(for micro-injection; for other methods see supplemental information)

- 1) To determine the application rate, refer to Table 1 [reverse side]. Identify plant size by determining tree diameter in inches at breast height (DBH") (measured at approximately 54" above the soil line). (If measuring tree circumference divide by 3 to obtain the DBH".)
- 2) Multiply the DBH" by the corresponding amount in the rate column to determine the application rate appropriate for plant size.
- 3) 1 part PHOSPHO-jet is diluted with 2 parts water. Determine the amount of water to be added by multiplying the ml PHOSPHO-jet (obtained in step #2 above) by 2.
- 4) Fill the tank with the water before adding PHOSPHO-jet.
- 5) Add PHOSPHO-jet slowly to the tank, close and gently agitate to mix.

Example: To treat a 10" DBH oak for root rot, see Table 1. Add 50 ml of PHOSPHO-jet (10" DBH x 5ml) into 100 ml (2 x 50 ml) water for a total injection volume of 150 ml. Inject 30 ml of the PHOSPHO-jet/water solution every 6" of trunk circumference as directed in Supplemental Label Arborjet Injection Procedures.

TABLE I PHOSPHO-JET USE & APPLICATION RATES

Plant	Disease	Plant Size (DBH")	Rate (ml/DBH")
Ornamental & Forest Trees	Root Rot (Phytophthora spp. including P. ramorum, P. cinnamomi, P. palmivora, P. cactorum), Anthracnose, Apple scab (Venturia inaequalis)	<12-23" 24-47" 48"+	5
Conifers, grown in commercial nurseries, plantations, and forest (including Christmas tree farms)	Root Rot (Phytophthora spp. including P. ramorum, P. cinnamomi)		7
			9
Crop Trees	Disease	Plant Size (DBH")	Rate (ml/DBH")
Avocados	Root Rot (Phytophthora cinnamomi, P. citricola)	<12-23" 24-27" 48"+	5
Citrus (mature trees)	Root, Foot and Collar Rot (Phytophthora spp. including P. nicotinae, P. citrophthora)		7
Coconuts	Bud – Nut Fall (Phytophthora palmivora)		9
Apples, Pears, Loquats, Quince	Fire Blight (Erwinia amylovora); Apple Scab (Venturia inaequalis); Black Spot (Diplocarpon rosae)		
Tree nuts such as Almonds, Walnuts	Root and Collar Rot (Phytophthora spp.)		

SUDDEN OAK DEATH*

Use PHOSPHO-jet for effective control of Phytophthora (Sudden Oak Death, Phytophthora ramorum), in landscapes, plantation trees, golf courses, forests and parks. Apply PHOSPHO-jet to Oaks (Black, Canyon, Coast, Live, Shreve) and Tan Oak.

Make applications before disease development and in conjunction with good cultural management practices. Do not exceed indicated application rates or apply more frequently than stated on label or tree injury may occur. Do not apply to trees that are heat or moisture stressed.

PHOSPHO-JET APPLICATION FOR OAKS		
Landscape, Golf Course, Plantation, Forest, and Park Applications	Disease	Rate
Oak (Quercus spp.) including Black, Canyon, Coast, Live, Shreve; Tan Oak	Sudden oak death Phytophthora ramorum	10 ml per 6 inch circumfer- ence (3.5 ml PHOSPHO-jet and 6.5 ml water)

CALCULATING APPLICATION RATE AND MIXING INSTRUCTIONS

The dilution rate is 1 part PHOSPHO-jet to 2 parts water. One injection of 10 ml of the PHOSPHO-jet /water solution is used per 6 inches of trunk circumference measured at 4 feet above the soil line.

In order to determine the application rate per tree:

- 1) Measure the trunk circumference 4 feet above the soil line.
- 2) Divide the number of inches of circumference by 6 to determine the number of injection sites.

[continued on next page]

3) Each 10 ml solution injection will have 3.5 ml PHOSPHO-jet and 6.5 ml water.

4) Multiply the number of injection sites by 3.5 to determine the amount of PHOSPHO-jet needed.

5) Multiply the number of injection sites by 6.5 to determine the amount of water needed.

6) Fill the tank with the water before adding PHOSPHO-jet.

7) Add PHOSPHO-jet slowly to the tank to reach the total amount of solution desired. (Total volume should equal number of injection sites \times 10 ml.) Close and gently agitate to mix.

Example: A trunk has a circumference of 48". Dividing by 6 = 8 injection sites. Multiplying 8 by 3.5 = 28 ml PHOSPHO-jet. Multiplying 8 by 6.5 = 52 ml water. Therefore, prepare a treatment solution with 28 ml PHOSPHO-jet added to 52 ml of water for a total volume of 80 ml (8 injection sites of 10 ml each).

For multiple or asymmetrical trunks, measure the tree canopy at the drip line. The application rate is one 10 ml injection per yard of canopy diameter.

Example: If the canopy diameter is 18 feet (6 yards), there will be 6 injection sites. Prepare a treatment solution with 21 ml PHOSPHO-jet (6×3.5 ml) added to 39 ml of water (6×6.5 ml) for a total volume of 60 ml (6 injection sites of 10 ml each).

Note: 324 ml (11 fl. oz) PHOSPHO-jet + 624 ml (21 fl. oz) water makes one quart of solution.

ARBORJET INJECTION PROCEDURES

GENERAL GUIDELINES:

Measure the tree diameter at chest height (54" from ground) in inches to find the Diameter at Breast Height (DBH). If measuring circumference, divide this number by three to determine Diameter at Breast Height (DBH).

Make applications to trees in full leaf. Alternatively, apply prior to bud break in spring or after leaf senescence (coloration or drop) in fall. Moist soil conditions and

moderate temperatures (i.e., >40 and <90°F) favor transpiration and are optimal for injection uptake.

Drill injection sites into the trunk or root flare (i.e., buttress) area, generally 6-8" from the soil level and 6" apart around the circumference of the tree.

For Phytophthora (Sudden Oak Death, Phytophthora ramorum), inject every 6 inches around trunk circumference measured at 4 feet above the soil line.

BASIC ARBORJET INJECTION PROCEDURES:

Drill 5/8" deep into the sapwood using the appropriate sized drill bit (7/32", 9/32" or 3/8" dia.). Drill at a 90 degree angle to the stem (i.e., straight into the sapwood). Avoid drilling into dead, dying or diseased tissue, or tissue with visible injury or cracks. Use clean and sharp drill bits. Initially apply no pressure to the drill; the bit will naturally cut through the bark. It will stop penetrating when it meets the harder sapwood. Next apply pressure to the drill to cut 5/8" into the sapwood.

Insert an Arborplug, and tap in using the set tool and mallet. Use the #3 (9/32" d) or #4 (3/8" d) Arborplug in hardwoods; in conifers, use the #4 Arborplug. Using the injection needle, pierce the internal septum to start the injection process. Shut off and remove the injection needle upon completion.

RESINOUS CONIFERS

In resinous conifers, such as pine and spruce insert the injection needle and open to start liquid flow immediately after inserting the Arborplug into the sapwood. A delay may reduce uptake due to resin flow.

MONOCOTS

Inject into the trunk into lignified (hardened, woody) tissues typically within 2-3 ft. of the soil. Drill into the stem 4" deep using the 3/8" drill bit. Insert a #4 Arborplug™. Inject through the Arborplug. Only one injection site is needed.

[continued on next page]

WHEN TO TREAT / TIMING OF STEM INJECTION APPLICATIONS

Tree Health and Growing Conditions:

Best results are obtained when treatments are applied prior to infection. Treat trees when foliar symptoms (e.g., spot, defoliation, dieback) affect less than 10% of the canopy. Anticipate early season foliar infections, by treating prior to bud break (for example, apple scab).

Phytophthora root rot occurs most frequently in poorly drained and compacted soils. Susceptible species are at risk of infection following heavy precipitation or irrigation. Trees growing in low lying areas are also at risk of disease. Treat as early as possible in the infection cycle for best tree response.

For optimal uptake, apply when soil is moist, soil temperatures are above 45°F, ambient temperatures are between 40° to 90°F, and during the 24-hour period when transpiration is greatest, typically before 2:00 PM.

Applications to drought or heat stressed trees may result in injury to

tree tissue, poor treatment and subsequent control. Watering the trees prior to injection may enhance the uptake of PHOSPHO-jet.

COMPATIBILITY

PHOSPHO-jet is compatible with most products used in agriculture. However, individual crop sensitivity to these mixtures may vary. Mixtures of PHOSPHO-jet with copper products are not always compatible or cause phytotoxicity to some plants. If these combinations or others have not been used previously, do not tank mix without first testing the compatibility of the tank mix. Do not apply tank mixture without first assessing its safety to the crop (phytotoxicity). Tank mix PHOSPHO-jet with fertilizers only if crop safety has been established and the PHOSPHO-jet use rates are followed.

Due to PHOSPHO-jet's acidic nature, do not use acidifying-type compatibility agents. If adjuvants are used, test them before use to confirm compatibility with PHOSPHO-jet.

Use a jar test to confirm compatibility with PHOSPHO-jet. In a clean jar using

the same water source that is normally used to fill spray tank, add the appropriate quantity of water and mix thoroughly. Let stand for 3 minutes. If mixture remains in solution or is remixed readily, the tank mixture is compatible.

Spray the solution that results from the above compatibility test onto a few plants until foliage is visibly wet and inspect for visual effects of phytotoxicity (leaf burn) 3-7 days later.

RESTRICTIONS

- DO NOT inject trees more than once annually unless otherwise indicated.
- Not recommended for newly planted (non-established) trees.
- DO NOT inject drought stressed trees.
- DO NOT treat trees that are damaged by herbicides.
- DO NOT inject trees within two weeks of any other spray or soil chemical treatment.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE:

Keep this product in containers stored upright and secured with the original closure. Do not store this product near any heat source. Do not store near any strong oxidants. If transfer to another container becomes necessary, ensure that the container is clearly labeled, the container is a type suitable for the product, and is clean and free of other materials. Keep from freezing.

PESTICIDE DISPOSAL:

Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL:

Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying.

For containers small enough to shake (≤ 5 gallons)

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for

[continued on next page]

10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsates into application equipment or a mix tank or store rinsates for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

For containers too large to shake (> 5 gallons or 50 lbs.)

Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or ~~store~~ rinsate for later use or disposal. Repeat this procedure two more times.

 Offer for recycling, if available.

NOTICE OF WARRANTY

ARBORJET, Inc makes no warranty of fitness of this product for any other purpose, beyond its uses under normal conditions in keeping with the statements made on this label.

SUPPLEMENTAL LABEL

PHOSPHO-jet Application Rates for Micro-injection Devices

See product label for application rate information.

Air/Hydraulic Micro-Injection Application

To inject, set the primary regulator to 75 PSI, charge the Dose-Sizer by pulling back on Dose-Sizer knob after priming, and apply the specified dose equally into the preset Arborplug.

QUIK-jet Micro-Injection Application

To Micro-Inject, set the Arborjet Tree Micro-Injector to the 5 ml setting. Draw formulation into the injector cylinder and squeeze handle to deliver the shot. Repeat until the full dose per injection site is delivered.

**PHOSPHO-JET APPLICATION RATES
FOR ARBORJET MICRO-INFUSION™ (i.e., TREE I.V.) APPLICATIONS**

Tree Size DBH"	# Injection sites	Rate mL/ DBH"	Treatment Solution	
			PHOSPHO-jet mLs/tree size (avg.) (1 part)	Water (2 parts)
6-8"	4	5	35	70
9-11"	5	5	50	100
12-14"	7	5	65	130
15-17"	8	5	80	160
18-20"	10	5	95	190
21-23"	11	5	110	220
24-26"	13	7	175	350
27-29"	14	7	196	392
30-32"	16	7	217	434
33-35"	17	7	238	476
36-38"	19	7	259	518
39-41"	20	7	280	560
42-44"	22	7	301	602
45-47"	23	7	322	644
48-50"	25	9	441	882
51-53"	26	9	468	936
54-56"	28	9	495	990
57-59"	29	9	522	1044
60-62"	31	9	549	1098
63-65"	32	9	576	1152
66-68"	34	9	603	1206
69-71"	35	9	630	1260

CLEAN-UP

IMPORTANT! It is critical to rinse the Arborjet Injection System thoroughly after use. Use **CLEAN-jet** or soap and water. Residues left in the device will corrode the internal components and void equipment warranty.

NOTES



Manufactured by: ARBORJET, INC.

781-935-9070

99 Blueberry Hill Road

Woburn, MA 01801

843

21.11.00

REV 7/2012

MATERIAL TO BE ADDED TO JACKET

REG #: 04578-3

Description: Phospho-Jet

if applicable, check all that are attached:		Send to CSC
<input checked="checked" type="checkbox"/>	new stamped accepted label	
<input type="checkbox"/>	new CSF	
<input type="checkbox"/>	notification	
<input type="checkbox"/>	other:	

Instructions:

Attach this sheet to the top of **ALL** material sent to the file room (both loose paper and new material in jackets). This sheet will be imaged; a clear description will aid in finding the material in the e-jacket. Remove staples from all material. If returning loose paper then hold together with a binder or paper clip. CSFs should be placed in the CSF folder (if returning jacket) or covered with a red CBI sheet (if returning loose paper). Material to be returned to file room should be placed in the appropriate bin.

Reviewer: Menyon Adams Date: MAR 08 2012

Phone: (703) 347-8496 Division: BPPD

Receipt for Section 3



S: 906076

Resubmission: ☐ Yes ☒ No

Regulatory Type: Product Registration - Section 3

Fee For Service: ☐ Yes ☒ No

Application Type: Amendment

Billable: ☒ Yes ☐ No

Company: 74578 ARBORJET



Print Letter

Enter More Information

Tracking

Risk Manager: Biologicals & Pollution Prevention Division, PM Team 91

Product #: 74578-3 Product Name: PHOSPHO-JET

Override#:

Me Too Section3: Me Too Product Name:

Application Date: 27-Oct-2011

OPP Rec'd Date: 28-Oct-2011

Front End Date: 28-Oct-2011

Risk Manager Send Date:

FFS Due Date:

Negotiated Due Date:

OPP Target Date:

Fast Track ☐

New Ingredient ☐

Receipt Description:

Label amendment

New Ingredient Request Date:

New Ingredient Received Date:

Signature Date:

Form A ☐ Signature Date:

Form B ☐

Receipt Content	Des
Paper Label	
<div> <div></div> <div></div> </div>	

View/Edit

Linds
03/10/12



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

MAR 09 2012

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

Christina Griffin, Agent
Arborjet, Inc.
c/o Delta Analytical Corp.
12510 Prosperity Dr. Suite 160
Silver Spring, MD 20904

Subject: Phospho-jet
EPA Registration No. 74578-3
Label Amendment to amend the directions for use
Decision # 457154
Application Dated: October 27, 2011

Dear Mrs.Griffin:

The amendment referred to above, submitted in connection with registration under FIFRA section 3(c)(5), is **acceptable** provided that you:

1. Submit and/or cite all data required for registration/reregistration of your product under FIFRA section 3(c) (5) when the Agency requires all registrants of similar products to submit such data.
2. Submit three (3) copies of your final printed labeling before you release the product for shipment. Final printed labeling means the label or labeling of the product when distributed or sold. Clearly legible reproductions or photo reductions will be accepted for unusual labels, such as those silk-screened directly onto glass or metal containers or large bags or drum labels.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(b). Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions.

If you have any questions contact Ms. Menyon Adams at 703-347-8496 or by email at: adams.menyon@epa.gov. A stamped copy of the label is enclosed for your records.

Sincerely,

A handwritten signature in black ink, appearing to read "Linda A. Hollis", is written over a horizontal line.

Linda A. Hollis, Chief
Biochemical Pesticides Branch
Biopesticides and Pollution
Prevention Division (7511P)

Master label including Sub-label A – Commercial Agricultural Uses and
Sub-label B – Residential Uses

ACCEPTED

Sub-label A – Commercial Agricultural Uses

[company logo]

MAR 09 2012

Under the Federal Insecticide, Fungicide,
and Rodenticide Act, as amended, for
the pesticide registered under
EPA Reg. No. 74578-3

PHOSPHO-jet

[For Use Against Sudden Oak Death] [in California]
[Systemic Fungicide] [Arboriculture in Motion] [Diverse Pest Control]
[Systemic Fungicide for Micro-Infusion]

Systemic fungicide for the suppression of [various plant diseases including root rot in avocado and citrus, bud rot and nut fall in coconut, black spot, scab, fire blight in apple, anthracnose in mango, sycamore, and dogwood,] [Phytophthora (causative of Sudden Oak Death) in oak,] [and for effective control of Phytophthora and Pythium diseases associated with stem and Canker Blight, Beech Decline, and general tree declines in landscapes.]

ACTIVE INGREDIENTS: Mono- and di-potassium salts of Phosphorous Acid 45.8%
OTHER INGREDIENTS: 54.2%
TOTAL 100.0%

Contains: 5.17lbs/gallon of the active ingredients, mono- and di-potassium salts of Phosphorous acid
Equivalent to 3.35 lbs Phosphorous acid/gallon

EPA Reg. No. 74578-3
EPA Est. No. 74578-MA-001

Manufactured for:
ARBORJET, Inc.
99 Blueberry Hill Road
Woburn, MA 01801
(781) 721-0795

Net Contents
[1 Quart], [1 Gallon], [5 gallons], [20 gallons], [55 gallons]
[Product label or container must bear a Batch Code]

KEEP OUT OF REACH OF CHILDREN CAUTION

FIRST AID	
IF SWALLOWED:	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Have person sip a glass of water if able to swallow.• Do not induce vomiting unless told to do so by a poison control center or doctor.• Do not give anything by mouth to an unconscious person.
IF IN EYES:	<ul style="list-style-type: none">• Hold eye open and rinse slowly and gently with water for 15-20 minutes.• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.• Call a poison control center or a doctor for treatment advice.
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water for 15-20 minutes.• Call a poison control center or a doctor for treatment advice.
IF INHALED:	<ul style="list-style-type: none">• Move person to fresh air.• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferable mouth-to-mouth, if possible.• Call a poison control center or a doctor for treatment advice.
Have the product container of label with you when calling a poison control center or doctor or going for treatment. You may also contact the National Poison Control Hotline at 1-800-222-1222, 24 hours a day, 7 days a week.	

ACCEPTED PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION. Harmful if swallowed, inhaled or absorbed through skin. Causes moderate eye irritation. Avoid breathing vapors or spray mist. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear protective eyewear, long pants and long-sleeved shirt, waterproof gloves, shoes plus socks.

Follow manufacturer's instructions for maintaining/cleaning personal protective equipment (PPE). If no such instructions for washables, use hot water and detergent. Keep and wash PPE separately from other laundry.

When handlers use closed systems, aircraft or enclosed cabs in a manner that meets the requirements listed in the worker protection standard (WPS) for agricultural pesticides (40 CFR 170.240 (d) (4-6), the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before drinking, eating, chewing gum, using tobacco, or using the toilet.
- Remove PPE clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

For Terrestrial uses: Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Read entire label before using this product.

Do not apply this product in any way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide registration.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Workers Protection Standard, CFR 40 part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours.

PPE required for early entry to treated areas that are permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soils or water, is: coveralls, waterproof gloves, shoes plus socks, and protective eyewear.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements of this box apply to uses of this product that are not within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR part 170.) The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

Do not enter treated areas without protective clothing until sprays have dried.

GENERAL APPLICATION INSTRUCTIONS

This product is for use with the **ARBORJET TREE INJECTION SYSTEMS** or those systems that meet the label and dosage requirements. Follow manufacturer's directions for use.

Micro-Injection Applications for use as formulated

PHOSPHO-jet may be applied undiluted by micro-injection. The PHOSPHO-jet dose rate is 5 mL per inch DBH.

Calculating Application Rate

The dosages and number of application sites are based on tree diameter.

To determine the application/dose rate per tree:

- 1) Measure the tree diameter in inches at chest height (54" from ground) to find the Diameter at Breast Height (DBH). (If measuring tree circumference, divide circumference by 3 to obtain the DBH in inches.)
- 2) Calculate the number of injection sites by dividing the DBH in inches by 2.
- 3) Multiply the tree DBH by the dosage rate (5 mL per inch DBH) to calculate the total dose in milliliters per tree.
- 4) Divide the total dose by the number of injection sites to determine required dosage per injection site.

Example: For a tree with a DBH of 12 inches (or circumference of 36 inches) and 5 mL dosage rate:

- 1) $DBH = 12"$ (circumference $36" \div 3 = 12"$)
- 2) Divide DBH of 12" by 2 = 6 injection sites.
- 3) Multiply DBH of 12 by 5 mL = 60 mL total dose per tree.
- 4) Divide 60 mL by 6 injection sites = 10 mL per injection site to deliver the required dosage.

Ornamental, Forest, Conifers, and Crop Trees

CALCULATING APPLICATION RATE AND MIXING INSTRUCTIONS (for micro-injection; for other methods see supplemental information)

- 1) To determine the application rate, refer to Table 1. Identify plant size by determining tree diameter in inches at breast height (DBH") (measured at approximately 54" above the soil line). (If measuring tree circumference divide by 3 to obtain the DBH".)
- 2) Multiply the DBH" by the corresponding amount in the rate column to determine the application rate appropriate for plant size.
- 3) 1 part PHOSPHO-jet is diluted with 2 parts water. Determine the amount of water to be added by multiplying the ml PHOSPHO-jet (obtained in step #2 above) by 2.
- 4) Fill the tank with the water before adding PHOSPHO-jet.
- 5) Add PHOSPHO-jet slowly to the tank, close and gently agitate to mix.

Example: To treat a 10" DBH oak for root rot, see Table 1. Add 50 ml of PHOSPHO-jet (10" DBH x 5ml) into 100 ml (2 x 50 ml) water for a total injection volume of 150 ml. Inject 30 ml of the PHOSPHO-jet/water solution every 6" of trunk circumference as directed in Supplemental Label Arborjet Injection Procedures.

Table 1 PHOSPHO-jet Use and Application Rates

Plant	Disease	Plant Size (DBH")	Rate (ml/DBH")
Ornamental & Forest Trees	Root Rot (<i>Phytophthora</i> spp. including <i>P. ramorum</i> , <i>P. cinnamomi</i> , <i>P. palmivora</i> , <i>P. cactorum</i>), Anthracnose, Apple scab (<i>Venturia inaequalis</i>)	<12-23" 24-47" 48"+	5
Conifers, grown in commercial nurseries, plantations, and forest (including Christmas tree farms)	Root Rot (<i>Phytophthora</i> spp. including <i>P. ramorum</i> , <i>P. cinnamomi</i>)		7
			9
Crop Trees	Disease	Plant Size (DBH")	Rate (ml/DBH")
Avocados	Root Rot (<i>Phytophthora cinnamomi</i> , <i>P. citricola</i>)	<12-23" 24-47" 48"+	5
Citrus (mature trees)	Root, Foot and Collar Rot (<i>Phytophthora</i> spp. including <i>P. nicotinae</i> , <i>P. citrophthora</i>)		7
Coconuts	Bud – Nut Fall (<i>Phytophthora palmivora</i>)		9
Apples, Pears, Loquats, Quince	Fire Blight (<i>Erwinia amylovora</i>); Apple Scab (<i>Venturia inaequalis</i>); Black Spot (<i>Diplocarpon rosae</i>)		
Tree nuts such as Almonds, Walnuts	Root and Collar Rot (<i>Phytophthora</i> spp.)		

Sudden Oak Death

Use PHOSPHO-jet for effective control of *Phytophthora* (Sudden Oak Death, *Phytophthora ramorum*), in landscapes, plantation trees, golf courses, forests and parks. Apply PHOSPHO-jet to Oaks (Black, Canyon, Coast, Live, Shreve) and Tan Oak.

Make applications before disease development and in conjunction with good cultural management practices. Do not exceed indicated application rates or apply more frequently than stated on label or tree injury may occur. Do not apply to trees that are heat or moisture stressed.

PHOSPHO-jet Application for Oaks [in California]

Landscape, Golf Course, Plantation, Forest, and Park Applications	Disease	Rate
Oak (<i>Quercus</i> spp.) including Black, Canyon, Coast, Live, Shreve; Tan Oak	Sudden oak death <i>Phytophthora ramorum</i>	10 ml per 6 inch circumference (3.5 ml PHOSPHO-jet and 6.5 ml water)

CALCULATING APPLICATION RATE AND MIXING INSTRUCTIONS

The dilution rate is 1 part PHOSPHO-jet to 2 parts water. One injection of 10 ml of the PHOSPHO-jet /water solution is used per 6 inches of trunk circumference measured at 4 feet above the soil line.

In order to determine the application rate per tree:

- 1) Measure the trunk circumference 4 feet above the soil line.
- 2) Divide the number of inches of circumference by 6 to determine the number of injection sites.
- 3) Each 10 ml solution injection will have 3.5 ml PHOSPHO-jet and 6.5 ml water.
- 4) Multiply the number of injection sites by 3.5 to determine the amount of PHOSPHO-jet needed.
- 5) Multiply the number of injection sites by 6.5 to determine the amount of water needed.
- 6) Fill the tank with the water before adding PHOSPHO-jet.
- 7) Add PHOSPHO-jet slowly to the tank to reach the total amount of solution desired. (Total volume should equal number of injection sites x 10 ml.) Close and gently agitate to mix.

Example: A trunk has a circumference of 48". Dividing by 6 = 8 injection sites. Multiplying 8 by 3.5 = 28 ml PHOSPHO-jet. Multiplying 8 by 6.5 = 52 ml water. Therefore, prepare a treatment solution with 28 ml PHOSPHO-jet added to 52 ml of water for a total volume of 80 ml (8 injection sites of 10 ml each).

For multiple or asymmetrical trunks, measure the tree canopy at the drip line. The application rate is one 10ml injection per yard of canopy diameter.

Example: If the canopy diameter is 18 feet (6 yards), there will be 6 injection sites. Prepare a treatment solution with 21 ml PHOSPHO-jet (6 x 3.5 ml) added to 39 ml of water (6 x 6.5 ml) for a total volume of 60 ml (6 injection sites of 10 ml each).

Note: 324 ml (11 fl. oz) PHOSPHO-jet + 624 ml (21 fl. oz) water makes one quart of solution.

Arborjet Injection Procedures

General Guidelines:

Measure the tree **diameter** at chest height (54" from ground) in inches to find the Diameter at Breast Height (DBH). If measuring circumference, divide this number by three to determine Diameter at Breast Height (DBH).

Make applications to trees in full leaf. Alternatively, apply prior to bud break in spring or after leaf senescence (coloration or drop) in fall. Moist soil conditions and moderate temperatures (i.e., >40 and <90°F) favor transpiration and are optimal for injection uptake.

Drill injection sites into the trunk or root flare (i.e., buttress) area, generally 6-8" from the soil level and 6" apart around the circumference of the tree.

For *Phytophthora* (Sudden Oak Death, *Phytophthora ramorum*), inject every 6 inches around trunk circumference measured at 4 feet above the soil line.

Basic Arborjet Injection Procedures:

Drill 5/8" deep into the sapwood using the appropriate sized drill bit (7/32", 9/32" or 3/8" dia.). Drill at a 90 degree angle to the stem (i.e., straight into the sapwood). Avoid drilling into dead, dying or diseased tissue, or tissue with visible injury or cracks. Use clean and sharp drill bits. Initially apply no pressure to the drill; the bit will naturally cut through the bark. It will stop penetrating when it meets the harder sapwood. Next apply pressure to the drill to cut 5/8" into the sapwood.

Insert an Arborplug, and tap in using the set tool and mallet. Use the #3 (9/32" d) or #4 (3/8" d) Arborplug in hardwoods; in conifers, use the #4 Arborplug. Using the injection needle, pierce the internal septum to start the injection process. Shut off and remove the injection needle upon completion.

Resinous Conifers

In resinous conifers, such as pine and spruce insert the injection needle and open to start liquid flow immediately after inserting the Arborplug into the sapwood. A delay may reduce uptake due to resin flow.

Monocots

Inject into the trunk into lignified (hardened, woody) tissues typically within 2-3 ft. of the soil. Drill into the stem 4" deep using the 3/8" drill bit. Insert a #4 Arborplug™. Inject through the Arborplug. Only one injection site is needed.

WHEN TO TREAT / TIMING OF STEM INJECTION APPLICATIONS

Tree Health and Growing Conditions:

Best results are obtained when treatments are applied prior to infection. Treat trees when foliar symptoms (e.g., spot, defoliation, dieback) affect less than 10% of the canopy. Anticipate early season foliar infections, by treating prior to bud break (for example, apple scab).

Phytophthora root rot occurs most frequently in poorly drained and compacted soils. Susceptible species are at risk of infection following heavy precipitation or irrigation. Trees growing in low lying areas are also at risk of disease. Treat as early as possible in the infection cycle for best tree response.

For optimal uptake, apply when soil is moist, soil temperatures are above 45°F, ambient temperatures are between 40° to 90°F, and during the 24 hour period when transpiration is greatest, typically before 2:00 PM. Applications to drought or heat stressed trees may result in injury to tree tissue, poor treatment and subsequent control. Watering the trees prior to injection may enhance the uptake of PHOSPHO-jet.

COMPATIBILITY

PHOSPHO-jet is compatible with most products used in agriculture. However, individual crop sensitivity to these mixtures may vary. Mixtures of PHOSPHO-jet with copper products are not always compatible or cause phytotoxicity to some plants. If these combinations or others have not been used previously, do not tank mix without first testing the compatibility of the tank mix. Do not apply tank mixture without first assessing its safety to the crop (phytotoxicity). Tank mix PHOSPHO-jet with fertilizers only if crop safety has been established and the PHOSPHO-jet use rates are followed.

Due to PHOSPHO-jet's acidic nature, do not use acidifying-type compatibility agents. If adjuvants are used, test them before use to confirm compatibility with PHOSPHO-jet.

Use a jar test to confirm compatibility with PHOSPHO-jet. In a clean jar using the same water source that is normally used to fill spray tank, add the appropriate quantity of water and mix thoroughly. Let stand for 3 minutes. If mixture remains in solution or is remixed readily, the tank mixture is compatible.

Spray the solution that results from the above compatibility test onto a few plants until foliage is visibly wet and inspect for visual effects of phytotoxicity (leaf burn) 3-7 days later.

RESTRICTIONS

- ✓ Do not inject trees more than once annually unless otherwise indicated
- ✓ Not recommended for newly planted (non-established) trees.
- ✓ DO NOT inject drought stressed trees.
- ✓ Do not treat trees that are damaged by herbicides.
- ✓ Do not inject trees within two weeks of any other spray or soil chemical treatment.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE:

Keep this product in containers stored upright and secured with the original closure. Do not store this product near any heat source. Do not store near any strong oxidants. If transfer to another container becomes necessary, ensure that the container is clearly labeled, the container is a type suitable for the product, and is clean and free of other materials. Keep from freezing.

PESTICIDE DISPOSAL:

Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

CONTAINER HANDLING:

Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying.

[For containers small enough to shake (≤ 5 gallons)] Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container $\frac{1}{4}$ full with water and recap. Shake for 10 seconds. Pour rinsates into application equipment or a mix tank or store rinsates for later use or disposal. Drain for 10 seconds after the flow begins to drip.

Repeat this procedure two more times.

[For containers too large to shake (> 5 gallons or 50 lbs.)] Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container $\frac{1}{4}$ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Offer for recycling, if available.

NOTICE OF WARRANTY

ARBORJET, Inc makes no warranty of fitness of this product for any other purpose, beyond its uses under normal conditions in keeping with the statements made on this label.

Sub-label B – Residential Uses

[company logo]

PHOSPHO-jet

[For Use Against Sudden Oak Death] [in California]
[Systemic Fungicide] [Arboriculture in Motion] [Diverse Pest Control]
[Systemic Fungicide for Micro-Infusion]

Systemic fungicide for the suppression of [various plant diseases including root rot in avocado and citrus, bud rot and nut fall in coconut, black spot, scab, fire blight in apple, anthracnose in mango, sycamore, and dogwood,] [Phytophthora (causative of Sudden Oak Death) in oak,][and for effective control of *Phytophthora* and *Pythium* diseases associated with stem and Canker Blight, Beech Decline, and general tree declines in landscapes.]

ACTIVE INGREDIENTS: Mono-and di-potassium salts of Phosphorous Acid 45.8%
OTHER INGREDIENTS: 54.2%
TOTAL 100.0%

Contains: 5.17lbs/gallon of the active ingredients, mono- and di-potassium salts of Phosphorous acid
Equivalent to 3.35 lbs Phosphorous acid/gallon

EPA Reg. No. 74578-3
EPA Est. No. 74578-MA-001

Manufactured by:
ARBORJET, Inc.
99 Blueberry Hill Road
Woburn, MA 01801
(781) 721-0795

Net Contents:

- ☐ 1 Quart
☐ 1 Gallon
☐ 5 Gallons

[Product label or container must bear a Batch Code]

KEEP OUT OF REACH OF CHILDREN CAUTION

FIRST AID	
IF SWALLOWED:	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Have person sip a glass of water if able to swallow.• Do not induce vomiting unless told to do so by a poison control center or doctor.• Do not give anything by mouth to an unconscious person.
IF IN EYES:	<ul style="list-style-type: none">• Hold eye open and rinse slowly and gently with water for 15-20 minutes.• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.• Call a poison control center or a doctor for treatment advice.
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water for 15-20 minutes.• Call a poison control center or a doctor for treatment advice.
IF INHALED:	<ul style="list-style-type: none">• Move person to fresh air.• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferable mouth-to-mouth, if possible.• Call a poison control center or a doctor for treatment advice.
Have the product container of label with you when calling a poison control center or doctor or going for treatment. You may also contact the National Poison Control Hotline at 1-800-222-1222, 24 hours a day, 7 days a week.	

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION. Harmful if swallowed, inhaled or absorbed through skin. Causes moderate eye irritation. Avoid breathing vapors or spray mist. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

ENVIRONMENTAL HAZARDS

To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Rinsing application equipment over the treated area will help avoid run off to water bodies or drainage systems.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Read entire label before using this product. For use in home gardens and ornamentals.

GENERAL APPLICATION INSTRUCTIONS

This product is for use with the **ARBORJET TREE INJECTION SYSTEMS** or those systems that meet the label and dosage requirements. Follow manufacturer's directions for use.

Micro-Injection Applications for use as formulated

PHOSPHO-jet may be applied undiluted by micro-injection. The PHOSPHO-jet dose rate is 5 mL per inch DBH.

Calculating Application Rate

The dosages and number of application sites are based on tree diameter.

To determine the application/dose rate per tree:

- 5) Measure the tree diameter in inches at chest height (54" from ground) to find the Diameter at Breast Height (DBH). (If measuring tree circumference, divide circumference by 3 to obtain the DBH in inches.)
- 6) Calculate the number of injection sites by dividing the DBH in inches by 2.
- 7) Multiply the tree DBH by the dosage rate (5 mL per inch DBH) to calculate the total dose in milliliters per tree.
- 8) Divide the total dose by the number of injection sites to determine required dosage per injection site.

Example: For a tree with a DBH of 12 inches (or circumference of 36 inches) and 5 mL dosage rate:

- 5) DBH = 12" (circumference 36" ÷ 3 = 12")
- 6) Divide DBH of 12" by 2 = 6 injection sites.
- 7) Multiply DBH of 12 by 5 mL = 60 mL total dose per tree.
- 8) Divide 60 mL by 6 injection sites = 10 mL per injection site to deliver the required dosage.

Ornamental, Conifers, and Fruit Trees

CALCULATING APPLICATION RATE AND MIXING INSTRUCTIONS

- 1) To determine the application rate, refer to Table 1. Identify plant size by determining tree diameter in inches at breast height (DBH") (measured at approximately 54" above the soil line). (If measuring tree circumference divide by 3 to obtain the DBH".)
- 2) Multiply the DBH" by the corresponding amount in the rate column to determine the application rate appropriate for plant size.
- 3) 1 part PHOSPHO-jet is diluted with 2 parts water. Determine the amount of water to be added by multiplying the ml PHOSPHO-jet (obtained in step #2 above) by 2.
- 4) Fill the tank with the water before adding PHOSPHO-jet.
- 5) Add PHOSPHO-jet slowly to the tank, close and gently agitate to mix.

Example: To treat a 10" DBH oak for root rot, see Table 1. Add 50 ml of PHOSPHO-jet (10" DBH x 5ml) into 100 ml (2 x 50 ml) water for a total injection volume of 150 ml. Inject 30 ml of the PHOSPHO-jet/water solution every 6" of trunk circumference as directed in Supplemental Label Arborjet Injection Procedures.

Table 1 PHOSPHO-jet Use and Application Rates

Plant	Disease	Plant Size (DBH")	Rate (ml/DBH")
Ornamental & Forest Trees	Root Rot (<i>Phytophthora</i> spp. including <i>P. ramoram</i> , <i>P. cinnamomi</i> , <i>P. palmivora</i> , <i>P. cactorum</i>), Anthracnose, Apple scab (<i>Venturia inaequalis</i>)	<12-23" 24-47" 48"+	5
Conifers, grown in commercial nurseries, plantations, and forest (including Christmas tree farms)	Root Rot (<i>Phytophthora</i> spp. including <i>P. ramoram</i> , <i>P. cinnamomi</i>)		7
			9
Crop Trees	Disease	Plant Size (DBH")	Rate (ml/DBH")
Avocados	Root Rot (<i>Phytophthora cinnamomi</i> , <i>P. citricola</i>)	<12-23" 24-47" 48"+	5
Citrus (mature trees)	Root, Foot and Collar Rot (<i>Phytophthora</i> spp. including <i>P. nicotinae</i> , <i>P. citrophthora</i>)		7
Coconuts	Bud – Nut Fall (<i>Phytophthora palmivora</i>)		9
Apples, Pears, Loquats, Quince	Fire Blight (<i>Erwinia amylovora</i>); Apple Scab (<i>Venturia inaequalis</i>); Black Spot (<i>Diplocarpon rosae</i>)		
Tree nuts such as Almonds, Walnuts	Root and Collar Rot (<i>Phytophthora</i> spp.)		

Sudden Oak Death

Use PHOSPHO-jet for effective control of *Phytophthora* (Sudden Oak Death, *Phytophthora ramoram*), in landscapes. Apply PHOSPHO-jet to Oaks (Black, Canyon, Coast, Live, Shreve) and Tan Oak.

Make applications before disease development and in conjunction with good cultural management practices. Do not exceed indicated application rates or apply more frequently than stated on label or tree injury may occur. Do not apply to trees that are heat or moisture stressed.

PHOSPHO-jet Application for Oaks [In California]

Landscape Applications	Disease	Rate
Oak (<i>Quercus</i> spp.) including Black, Canyon, Coast, Live, Shreve; Tan Oak	Sudden oak death <i>Phytophthora ramoram</i>	10 ml per 6 inch circumference (3.5 ml PHOSPHO-jet and 6.5 ml water)

CALCULATING APPLICATION RATE AND MIXING INSTRUCTIONS

The dilution rate is 1 part PHOSPHO-jet to 2 parts water. One injection of 10 ml of the PHOSPHO-jet /water solution is used per 6 inches of trunk circumference measured at 4 feet above the soil line.

In order to determine the application rate per tree:

- 1) Measure the trunk circumference 4 feet above the soil line.
- 2) Divide the number of inches of circumference by 6 to determine the number of injection sites.
- 3) Each 10 ml solution injection will have 3.5 ml PHOSPHO-jet and 6.5 ml water.
- 4) Multiply the number of injection sites by 3.5 to determine the amount of PHOSPHO-jet needed.
- 5) Multiply the number of injection sites by 6.5 to determine the amount of water needed.
- 6) Fill the tank with the water before adding PHOSPHO-jet.
- 7) Add PHOSPHO-jet slowly to the tank to reach the total amount of solution desired. (Total volume should equal number of injection sites x 10 ml.) Close and gently agitate to mix.

Example: A trunk has a circumference of 48". Dividing by 6 = 8 injection sites. Multiplying 8 by 3.5 = 28 ml PHOSPHO-jet. Multiplying 8 by 6.5 = 52 ml water. Therefore, prepare a treatment solution with 28 ml PHOSPHO-jet added to 52 ml of water for a total volume of 80 ml (8 injection sites of 10 ml each).

For multiple or asymmetrical trunks, measure the tree canopy at the drip line. The application rate is one 10ml injection per yard of canopy diameter.

Example: If the canopy diameter is 18 feet (6 yards), there will be 6 injection sites. Prepare a treatment solution with 21 ml PHOSPHO-jet (6 x 3.5 ml) added to 39 ml of water (6 x 6.5 ml) for a total volume of 60 ml (6 injection sites of 10 ml each).

Note: 324 ml (11 fl. oz) PHOSPHO-jet + 624 ml (21 fl. oz) water makes one quart of solution.

Arborjet Injection Procedures

General Guidelines:

Measure the tree **diameter** at chest height (54" from ground) in inches to find the Diameter at Breast Height (DBH). If measuring circumference, divide this number by three to determine Diameter at Breast Height (DBH).

Make applications to trees in full leaf. Alternatively, apply prior to bud break in spring or after leaf senescence (coloration or drop) in fall. Moist soil conditions and moderate temperatures (i.e., >40 and <90°F) favor transpiration and are optimal for injection uptake.

Drill injection sites into the trunk or root flare (i.e., buttress) area, generally 6-8" from the soil level and 6" apart around the circumference of the tree.

For *Phytophthora* (Sudden Oak Death, *Phytophthora ramorum*), inject every 6 inches around trunk circumference measured at 4 feet above the soil line.

Basic Arborjet Injection Procedures:

Drill 5/8" deep into the sapwood using the appropriate sized drill bit (7/32", 9/32" or 3/8" dia.). Drill at a 90 degree angle to the stem (i.e., straight into the sapwood). Avoid drilling into dead, dying or diseased tissue, or tissue with visible injury or cracks. Use clean and sharp drill bits. Initially apply no pressure to the drill; the bit will naturally cut through the bark. It will stop penetrating when it meets the harder sapwood. Next apply pressure to the drill to cut 5/8" into the sapwood.

Insert an Arborplug, and tap in using the set tool and mallet. Use the #3 (9/32" d) or #4 (3/8" d) Arborplug in hardwoods; in conifers, use the #4 Arborplug. Using the injection needle, pierce the internal septum to start the injection process. Shut off and remove the injection needle upon completion.

Resinous Conifers In resinous conifers, such as pine and spruce insert the injection needle and open to start liquid flow immediately after inserting the Arborplug into the sapwood. A delay may reduce uptake due to resin flow.

Monocots

Inject into the trunk into lignified (hardened, woody) tissues typically within 2-3 ft. of the soil. Drill into the stem 4" deep using the 3/8" drill bit. Insert a #4 Arborplug™. Inject through the Arborplug. Only one injection site is needed.

WHEN TO TREAT / TIMING OF STEM INJECTION APPLICATIONS

Tree Health and Growing Conditions:

Best results are obtained when treatments are applied prior to infection. Treat trees when foliar symptoms (e.g., spot, defoliation, dieback) affect less than 10% of the canopy. Anticipate early season foliar infections, by treating prior to bud break (for example, apple scab).

Phytophthora root rot occurs most frequently in poorly drained and compacted soils. Susceptible species are at risk of infection following heavy precipitation or irrigation. Trees growing in low lying areas are also at risk of disease. Treat as early as possible in the infection cycle for best tree response.

For optimal uptake, apply when soil is moist, soil temperatures are above 45°F, ambient temperatures are between 40° to 90°F, and during the 24 hour period when transpiration is greatest, typically before 2:00 PM. Applications to drought or heat stressed trees may result in injury to tree tissue, poor treatment and subsequent control. Watering the trees prior to injection may enhance the uptake of PHOSPHO-jet.

RESTRICTIONS

- ✓ Do not inject trees more than once annually unless otherwise indicated
- ✓ Not recommended for newly planted (non-established) trees.
- ✓ DO NOT inject drought stressed trees.
- ✓ Do not treat trees that are damaged by herbicides.
- ✓ Do not inject trees within two weeks of any other spray or soil chemical treatment.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE:

Keep this product in containers stored upright and secured with the original closure. Do not store this product near any heat source. Do not store near any strong oxidants. If transfer to another container becomes necessary, ensure that the container is clearly labeled, the container is a type suitable for the product, and is clean and free of other materials. Keep from freezing.

CONTAINER HANDLING:

Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. If partly filled: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

NOTICE OF WARRANTY

ARBORJET, Inc makes no warranty of fitness of this product for any other purpose, beyond its uses under normal conditions in keeping with the statements made on this label.

Supplemental Label

PHOSPHO-jet Application Rates for Micro-injection Devices

See product label for application rate information.

Air/Hydraulic Micro-Injection Application

To inject, set the primary regulator to 75 PSI, charge the Dose-Sizer by pulling back on Dose-Sizer knob after priming, and apply the specified dose equally into the preset Arborplug.

QUIK-jet Micro-Injection Application

To Micro-Inject, set the Arborjet Tree Micro-Injector to the 5 ml setting. Draw formulation into the injector cylinder and squeeze handle to deliver the shot. Repeat until the full dose per injection site is delivered.

PHOSPHO-jet APPLICATION RATES for Arborjet Micro-Infusion™ (i.e., Tree I.V.) Applications

Tree Size DBH"	# Injection sites	Rate mL/DBH"	Treatment Solution	
			PHOSPHO-jet mLs/tree size (avg.) (1 part)	Water (2 parts)
6-8"	4	5	35	70
9-11"	5	5	50	100
12-14"	7	5	65	130
15-17"	8	5	80	160
18-20"	10	5	95	190
21-23"	11	5	110	220
24-26"	13	7	175	350
27-29"	14	7	196	392
30-32"	16	7	217	434
33-35"	17	7	238	476
36-38"	19	7	259	518
39-41"	20	7	280	560
42-44"	22	7	301	602
45-47"	23	7	322	644
48-50"	25	9	441	882
51-53"	26	9	468	936
54-56"	28	9	495	990
57-59"	29	9	522	1044
60-62"	31	9	549	1098
63-65"	32	9	576	1152
66-68"	34	9	603	1206
69-71"	35	9	630	1260

CLEAN-UP

IMPORTANT! It is critical to rinse the Arborjet Injection System thoroughly after use. Use **CLEAN-jet** or soap and water. Residues left in the device will corrode the internal components and void equipment warranty.



October 27, 2011

Document Processing Desk (AMEND)
Office of Pesticide Programs (7511)
Environmental Protection Agency
One Potomac Yard
2777 South Crystal Drive, Room S-4900
Arlington VA 22202

Attn: Linda Hollis, Chief Biochemical Pesticides Branch
Biopesticides and Pollution Prevention Division (BPPD)

RE: Label Amendment to update directions for use
Product name: PHOSPHO-jet
EPA Reg. No.: 74578-3
Company: Arborjet, Inc.

Dear Ms. Hollis:

On behalf of Arborjet, Inc., I am submitting a label amendment for the product PHOSPHO-jet, EPA Reg. No: 74578-3. The purpose of the amendment is to update directions for use. There is no change in use sites. All revised language is highlighted. Some directions that previously were included under supplemental labeling were moved to the main body of the label on page 5, but are not highlighted because they are not new.

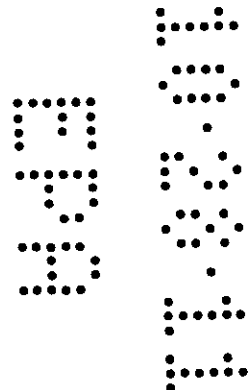
Enclosures:

- Application for Pesticide (EPA Form 8570-1)
- Formulator's Exemption form
- 5 copies of revised label

If you have questions regarding this submission, please contact me at cgriffin@delta-ac.com or (301) 680-7971.

Sincerely,

Cristina Griffin,
Agent for Arborjet, Inc.



Master label including Sub-label A – Commercial Agricultural Uses and
Sub-label B – Residential Uses

Sub-label A – Commercial Agricultural Uses

[company logo]

PHOSPHO-jet

[For Use Against Sudden Oak Death] [in California]
[Systemic Fungicide] [Arboriculture in Motion] [Diverse Pest Control]
[Systemic Fungicide for Micro-Infusion]

Systemic fungicide for the suppression of [various plant diseases including root rot in avocado and citrus, bud rot and nut fall in coconut, black spot, scab, fire blight in apple, anthracnose in mango, sycamore, and dogwood,] [Phytophthora (causative of Sudden Oak Death) in oak,] [and for effective control of *Phytophthora* and *Pythium* diseases associated with stem and Canker Blight, Beech Decline, and general tree declines in landscapes.]

ACTIVE INGREDIENTS: Mono- and di-potassium salts of Phosphorous Acid 45.8%
OTHER INGREDIENTS: 54.2%
TOTAL 100.0%

Contains: 5.17lbs/gallon of the active ingredients, mono- and di-potassium salts of Phosphorous acid
Equivalent to 3.35 lbs Phosphorous acid/gallon

EPA Reg. No. 74578-3
EPA Est. No. 74578-MA-001

Net Contents
[1 Quart], [1 Gallon], [5 gallons], [20 gallons], [55 gallons]
[Product label or container must bear a Batch Code]

Manufactured for:
ARBORJET, Inc.
99 Blueberry Hill Road
Woburn, MA 01801
(781) 721-0795

KEEP OUT OF REACH OF CHILDREN CAUTION

FIRST AID	
IF SWALLOWED:	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Have person sip a glass of water if able to swallow.• Do not induce vomiting unless told to do so by a poison control center or doctor.• Do not give anything by mouth to an unconscious person.
IF IN EYES:	<ul style="list-style-type: none">• Hold eye open and rinse slowly and gently with water for 15-20 minutes.• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.• Call a poison control center or a doctor for treatment advice.
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water for 15-20 minutes.• Call a poison control center or a doctor for treatment advice.
IF INHALED:	<ul style="list-style-type: none">• Move person to fresh air.• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferable mouth-to-mouth, if possible.• Call a poison control center or a doctor for treatment advice.
Have the product container of label with you when calling a poison control center or doctor or going for treatment. You may also contact the National Poison Control Hotline at 1-800-222-1222, 24 hours a day, 7 days a week.	

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION. Harmful if swallowed, inhaled or absorbed through skin. Causes moderate eye irritation. Avoid breathing vapors or spray mist. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear protective eyewear, long pants and long-sleeved shirt, waterproof gloves, shoes plus socks.

Follow manufacturer's instructions for maintaining/cleaning personal protective equipment (PPE). If no such instructions for washables, use hot water and detergent. Keep and wash PPE separately from other laundry.

When handlers use closed systems, aircraft or enclosed cabs in a manner that meets the requirements listed in the worker protection standard (WPS) for agricultural pesticides (40 CFR 170.240 (d) (4-6), the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before drinking, eating, chewing gum, using tobacco, or using the toilet.
- Remove PPE clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

For Terrestrial uses: Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Read entire label before using this product.

Do not apply this product in any way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide registration.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Workers Protection Standard, CFR 40 part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours.

PPE required for early entry to treated areas that are permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soils or water, is: coveralls, waterproof gloves, shoes plus socks, and protective eyewear.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements of this box apply to uses of this product that are not within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR part 170.) The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

Do not enter treated areas without protective clothing until sprays have dried.

GENERAL APPLICATION INSTRUCTIONS

This product is for use with the **ARBORJET TREE INJECTION SYSTEMS** or those systems that meet the label and dosage requirements. Follow manufacturer's directions for use.

Micro-injection Applications for use as formulated

PHOSPHO-jet may be applied undiluted by micro-injection. The PHOSPHO-jet dose rate is 5 mL per inch DBH.

Calculating Application Rate

The dosages and number of application sites are based on tree diameter.

To determine the application/dose rate per tree:

- 1) Measure the tree diameter in inches at chest height (54" from ground) to find the Diameter at Breast Height (DBH). (If measuring tree circumference, divide circumference by 3 to obtain the DBH in inches.)
- 2) Calculate the number of injection sites by dividing the DBH in inches by 2.
- 3) Multiply the tree DBH by the dosage rate (5 mL per inch DBH) to calculate the total dose in milliliters per tree.
- 4) Divide the total dose by the number of injection sites to determine required dosage per injection site.

Example: For a tree with a DBH of 12 inches (or circumference of 36 inches) and 5 mL dosage rate:

- 1) $DBH = 12''$ (circumference $36'' \div 3 = 12''$)
- 2) Divide DBH of 12" by 2 = 6 injection sites.
- 3) Multiply DBH" of 12 by 5 mL = 60 mL total dose per tree.
- 4) Divide 60 mL by 6 injection sites = 10 mL per injection site to deliver the required dosage.

Ornamental, Forest, Conifers, and Crop Trees

CALCULATING APPLICATION RATE AND MIXING INSTRUCTIONS (for micro-injection; for other methods see supplemental information)

- 1) To determine the application rate, refer to Table 1. Identify plant size by determining tree diameter in inches at breast height (DBH") (measured at approximately 54" above the soil line). (If measuring tree circumference divide by 3 to obtain the DBH".)
- 2) Multiply the DBH" by the corresponding amount in the rate column to determine the application rate appropriate for plant size.
- 3) 1 part PHOSPHO-jet is diluted with 2 parts water. Determine the amount of water to be added by multiplying the ml PHOSPHO-jet (obtained in step #2 above) by 2.
- 4) Fill the tank with the water before adding PHOSPHO-jet.
- 5) Add PHOSPHO-jet slowly to the tank, close and gently agitate to mix.

Example: To treat a 10" DBH oak for root rot, see Table 1. Add 50 ml of PHOSPHO-jet (10" DBH x 5ml) into 100 ml (2 x 50 ml) water for a total injection volume of 150 ml. Inject 30 ml of the PHOSPHO-jet/water solution every 6" of trunk circumference as directed in Supplemental Label Arborjet Injection Procedures.

Table 1 PHOSPHO-jet Use and Application Rates

Plant	Disease	Plant Size (DBH")	Rate (ml/DBH")
Ornamental & Forest Trees	Root Rot (<i>Phytophthora</i> spp. including <i>P. ramoram</i> , <i>P. cinnamomi</i> , <i>P. palmivora</i> , <i>P. cactorum</i>), Anthracnose, Apple scab (<i>Venturia inaequalis</i>)	<12-23" 24-47" 48"+	5
Conifers, grown in commercial nurseries, plantations, and forest (including Christmas tree farms)	Root Rot (<i>Phytophthora</i> spp. including <i>P. ramoram</i> , <i>P. cinnamomi</i>)		7
			9
Crop Trees	Disease	Plant Size (DBH")	Rate (ml/DBH")
Avocados	Root Rot (<i>Phytophthora cinnamomi</i> , <i>P. citricola</i>)	<12-23" 24-47" 48"+	5
Citrus (mature trees)	Root, Foot and Collar Rot (<i>Phytophthora</i> spp. including <i>P. nicotinae</i> , <i>P. citrophthora</i>)		7
Coconuts	Bud – Nut Fall (<i>Phytophthora palmivora</i>)		9
Apples, Pears, Loquats, Quince	Fire Blight (<i>Erwinia amylovora</i>); Apple Scab (<i>Venturia inaequalis</i>); Black Spot (<i>Diplocarpon rosae</i>)		
Tree nuts such as Almonds, Walnuts	Root and Collar Rot (<i>Phytophthora</i> spp.)		

Sudden Oak Death

Use PHOSPHO-jet for effective control of *Phytophthora* (Sudden Oak Death, *Phytophthora ramoram*), in landscapes, plantation trees, golf courses, forests and parks. Apply PHOSPHO-jet to Oaks (Black, Canyon, Coast, Live, Shreve) and Tan Oak.

Make applications before disease development and in conjunction with good cultural management practices. Do not exceed indicated application rates or apply more frequently than stated on label or tree injury may occur. Do not apply to trees that are heat or moisture stressed.

PHOSPHO-jet Application for Oaks [In California]

Landscape, Golf Course, Plantation, Forest, and Park Applications	Disease	Rate
Oak (<i>Quercus</i> spp.) including Black, Canyon, Coast, Live, Shreve; Tan Oak	Sudden oak death <i>Phytophthora ramoram</i>	10 ml per 6 inch circumference (3.5 ml PHOSPHO-jet and 6.5 ml water)

CALCULATING APPLICATION RATE AND MIXING INSTRUCTIONS

The dilution rate is 1 part PHOSPHO-jet to 2 parts water. One injection of 10 ml of the PHOSPHO-jet /water solution is used per 6 inches of trunk circumference measured at 4 feet above the soil line.

In order to determine the application rate per tree:

- 1) Measure the trunk circumference 4 feet above the soil line.
- 2) Divide the number of inches of circumference by 6 to determine the number of injection sites.
- 3) Each 10 ml solution injection will have 3.5 ml PHOSPHO-jet and 6.5 ml water.
- 4) Multiply the number of injection sites by 3.5 to determine the amount of PHOSPHO-jet needed.
- 5) Multiply the number of injection sites by 6.5 to determine the amount of water needed.
- 6) Fill the tank with the water before adding PHOSPHO-jet.
- 7) Add PHOSPHO-jet slowly to the tank to reach the total amount of solution desired. (Total volume should equal number of injection sites x 10 ml.) Close and gently agitate to mix.

Example: A trunk has a circumference of 48". Dividing by 6 = 8 injection sites. Multiplying 8 by 3.5 = 28 ml PHOSPHO-jet. Multiplying 8 by 6.5 = 52 ml water. Therefore, prepare a treatment solution with 28 ml PHOSPHO-jet added to 52 ml of water for a total volume of 80 ml (8 injection sites of 10 ml each).

For multiple or asymmetrical trunks, measure the tree canopy at the drip line. The application rate is one 10ml injection per yard of canopy diameter.

Example: If the canopy diameter is 18 feet (6 yards), there will be 6 injection sites. Prepare a treatment solution with 21 ml PHOSPHO-jet (6 x 3.5 ml) added to 39 ml of water (6 x 6.5 ml) for a total volume of 60 ml (6 injection sites of 10 ml each).

Note: 324 ml (11 fl. oz) PHOSPHO-jet + 624 ml (21 fl. oz) water makes one quart of solution.

Arborjet Injection Procedures

General Guidelines:

Measure the tree **diameter** at chest height (54" from ground) in inches to find the Diameter at Breast Height (DBH). If measuring circumference, divide this number by three to determine Diameter at Breast Height (DBH).

Make applications to trees in full leaf. Alternatively, apply prior to bud break in spring or after leaf senescence (coloration or drop) in fall. Moist soil conditions and moderate temperatures (i.e., >40 and <90 °F) favor transpiration and are optimal for injection uptake.

Drill injection sites into the trunk or root flare (i.e., buttress) area, generally 6-8" from the soil level and 6" apart around the circumference of the tree.

For *Phytophthora* (Sudden Oak Death, *Phytophthora ramorum*), inject every 6 inches around trunk circumference measured at 4 feet above the soil line.

Basic Arborjet Injection Procedures:

Drill 5/8" deep into the sapwood using the appropriate sized drill bit (7/32", 9/32" or 3/8" dia.). Drill at a 90 degree angle to the stem (i.e., straight into the sapwood). Avoid drilling into dead, dying or diseased tissue, or tissue with visible injury or cracks. Use clean and sharp drill bits. Initially apply no pressure to the drill; the bit will naturally cut through the bark. It will stop penetrating when it meets the harder sapwood. Next apply pressure to the drill to cut 5/8" into the sapwood.

Insert an Arborplug, and tap in using the set tool and mallet. Use the #3 (9/32" d) or #4 (3/8" d) Arborplug in hardwoods; in conifers, use the #4 Arborplug. Using the injection needle, pierce the internal septum to start the injection process. Shut off and remove the injection needle upon completion.

Resinous Conifers

In resinous conifers, such as pine and spruce insert the injection needle and open to start liquid flow immediately after inserting the Arborplug into the sapwood. A delay may reduce uptake due to resin flow.

Monocots

Inject into the trunk into lignified (hardened, woody) tissues typically within 2-3 ft. of the soil. Drill into the stem 4" deep using the 3/8" drill bit. Insert a #4 Arborplug™. Inject through the Arborplug. Only one injection site is needed.

WHEN TO TREAT / TIMING OF STEM INJECTION APPLICATIONS

Tree Health and Growing Conditions:

Best results are obtained when treatments are applied prior to infection. Treat trees when foliar symptoms (e.g., spot, defoliation, dieback) affect less than 10% of the canopy. Anticipate early season foliar infections, by treating prior to bud break (for example, apple scab).

Phytophthora root rot occurs most frequently in poorly drained and compacted soils. Susceptible species are at risk of infection following heavy precipitation or irrigation. Trees growing in low lying areas are also at risk of disease. Treat as early as possible in the infection cycle for best tree response.

For optimal uptake, apply when soil is moist, soil temperatures are above 45°F, ambient temperatures are between 40° to 90°F, and during the 24 hour period when transpiration is greatest, typically before 2:00 PM. Applications to drought or heat stressed trees may result in injury to tree tissue, poor treatment and subsequent control. Watering the trees prior to injection may enhance the uptake of PHOSPHO-jet.

COMPATIBILITY

PHOSPHO-jet is compatible with most products used in agriculture. However, individual crop sensitivity to these mixtures may vary. Mixtures of PHOSPHO-jet with copper products are not always compatible or cause phytotoxicity to some plants. If these combinations or others have not been used previously, do not tank mix without first testing the compatibility of the tank mix. Do not apply tank mixture without first assessing its safety to the crop (phytotoxicity). Tank mix PHOSPHO-jet with fertilizers only if crop safety has been established and the PHOSPHO-jet use rates are followed.

Due to PHOSPHO-jet's acidic nature, do not use acidifying-type compatibility agents. If adjuvants are used, test them before use to confirm compatibility with PHOSPHO-jet.

Use a jar test to confirm compatibility with PHOSPHO-jet. In a clean jar using the same water source that is normally used to fill spray tank, add the appropriate quantity of water and mix thoroughly. Let stand for 3 minutes. If mixture remains in solution or is remixed readily, the tank mixture is compatible.

Spray the solution that results from the above compatibility test onto a few plants until foliage is visibly wet and inspect for visual effects of phytotoxicity (leaf burn) 3-7 days later.

RESTRICTIONS

- ✓ Do not inject trees more than once annually unless otherwise indicated
- ✓ Not recommended for newly planted (non-established) trees.
- ✓ DO NOT inject drought stressed trees.
- ✓ Do not treat trees that are damaged by herbicides.
- ✓ Do not inject trees within two weeks of any other spray or soil chemical treatment.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE:

Keep this product in containers stored upright and secured with the original closure. Do not store this product near any heat source. Do not store near any strong oxidants. If transfer to another container becomes necessary, ensure that the container is clearly labeled, the container is a type suitable for the product, and is clean and free of other materials. Keep from freezing.

PESTICIDE DISPOSAL:

Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

CONTAINER HANDLING:

Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying.

[For containers small enough to shake (<5 gallons)] Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsates into application equipment or a mix tank or store rinsates for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

[For containers too large to shake (>5 gallons or 50 lbs.)] Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container 1/4 full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Offer for recycling, if available.

NOTICE OF WARRANTY

ARBORJET, Inc makes no warranty of fitness of this product for any other purpose, beyond its uses under normal conditions in keeping with the statements made on this label.

Sub-label B – Residential Uses

[company logo]

PHOSPHO-jet

[For Use Against Sudden Oak Death] [in California]
[Systemic Fungicide] [Arboriculture in Motion] [Diverse Pest Control]
[Systemic Fungicide for Micro-Infusion]

Systemic fungicide for the suppression of [various plant diseases including root rot in avocado and citrus, bud rot and nut fall in coconut, black spot, scab, fire blight in apple, anthracnose in mango, sycamore, and dogwood,] [Phytophthora (causative of Sudden Oak Death) in oak,][and for effective control of *Phytophthora* and *Pythium* diseases associated with stem and Canker Blight, Beech Decline, and general tree declines in landscapes.]

ACTIVE INGREDIENTS: Mono-and di-potassium salts of Phosphorous Acid	45.8%
OTHER INGREDIENTS:	54.2%
TOTAL	100.0%

Contains: 5.17lbs/gallon of the active ingredients, mono- and di-potassium salts of Phosphorous acid
Equivalent to 3.35 lbs Phosphorous acid/gallon

EPA Reg. No. 74578-3
EPA Est. No. 74578-MA-001

Manufactured by:
ARBORJET, Inc.
99 Blueberry Hill Road
Woburn, MA 01801
(781) 721-0795

Net Contents:

- ☐ 1 Quart
- ☐ 1 Gallon
- ☐ 5 Gallons

[Product label or container must bear a Batch Code]

KEEP OUT OF REACH OF CHILDREN CAUTION

FIRST AID	
IF SWALLOWED:	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Have person sip a glass of water if able to swallow.• Do not induce vomiting unless told to do so by a poison control center or doctor.• Do not give anything by mouth to an unconscious person.
IF IN EYES:	<ul style="list-style-type: none">• Hold eye open and rinse slowly and gently with water for 15-20 minutes.• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.• Call a poison control center or a doctor for treatment advice.
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water for 15-20 minutes.• Call a poison control center or a doctor for treatment advice.
IF INHALED:	<ul style="list-style-type: none">• Move person to fresh air.• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferable mouth-to-mouth, if possible.• Call a poison control center or a doctor for treatment advice.
Have the product container or label with you when calling a poison control center or doctor or going for treatment. You may also contact the National Poison Control Hotline at 1-800-222-1222, 24 hours a day, 7 days a week.	

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION. Harmful if swallowed, inhaled or absorbed through skin. Causes moderate eye irritation. Avoid breathing vapors or spray mist. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

ENVIRONMENTAL HAZARDS

To protect the environment, do not allow pesticide to enter or run off into storm drains, drainage ditches, gutters or surface waters. Rinsing application equipment over the treated area will help avoid run off to water bodies or drainage systems.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Read entire label before using this product. For use in home gardens and ornamentals.

GENERAL APPLICATION INSTRUCTIONS

This product is for use with the **ARBORJET TREE INJECTION SYSTEMS** or those systems that meet the label and dosage requirements. Follow manufacturer's directions for use.

Micro-Injection Applications for use as formulated

PHOSPHO-jet may be applied undiluted by micro-injection. The PHOSPHO-jet dose rate is 5 mL per inch DBH.

Calculating Application Rate

The dosages and number of application sites are based on tree diameter.

To determine the application/dose rate per tree:

- 5) Measure the tree diameter in inches at chest height (54" from ground) to find the Diameter at Breast Height (DBH). (If measuring tree circumference, divide circumference by 3 to obtain the DBH in inches.)
- 6) Calculate the number of injection sites by dividing the DBH in inches by 2.
- 7) Multiply the tree DBH by the dosage rate (5 mL per inch DBH) to calculate the total dose in milliliters per tree.
- 8) Divide the total dose by the number of injection sites to determine required dosage per injection site.

Example: For a tree with a DBH of 12 inches (or circumference of 36 inches) and 5 mL dosage rate:

- 5) $DBH = 12"$ (circumference $36" \div 3 = 12"$)
- 6) Divide DBH of 12" by 2 = 6 injection sites.
- 7) Multiply DBH of 12 by 5 mL = 60 mL total dose per tree.
- 8) Divide 60 mL by 6 injection sites = 10 mL per injection site to deliver the required dosage.

Ornamental, Conifers, and Fruit Trees

CALCULATING APPLICATION RATE AND MIXING INSTRUCTIONS

- 1) To determine the application rate, refer to Table 1. Identify plant size by determining tree diameter in inches at breast height (DBH") (measured at approximately 54" above the soil line). (If measuring tree circumference divide by 3 to obtain the DBH".)
- 2) Multiply the DBH" by the corresponding amount in the rate column to determine the application rate appropriate for plant size.
- 3) 1 part PHOSPHO-jet is diluted with 2 parts water. Determine the amount of water to be added by multiplying the ml PHOSPHO-jet (obtained in step #2 above) by 2.
- 4) Fill the tank with the water before adding PHOSPHO-jet.
- 5) Add PHOSPHO-jet slowly to the tank, close and gently agitate to mix.

Example: To treat a 10" DBH oak for root rot, see Table 1. Add 50 ml of PHOSPHO-jet (10" DBH x 5ml) into 100 ml (2 x 50 ml) water for a total injection volume of 150 ml. Inject 30 ml of the PHOSPHO-jet/water solution every 6" of trunk circumference as directed in Supplemental Label Arborjet Injection Procedures.

Table 1 PHOSPHO-jet Use and Application Rates

Plant	Disease	Plant Size (DBH")	Rate (ml/DBH")
Ornamental & Forest Trees	Root Rot (<i>Phytophthora</i> spp. including <i>P. ramorum</i> , <i>P. cinnamomi</i> , <i>P. palmivora</i> , <i>P. cactorum</i>), Anthracnose, Apple scab (<i>Venturia inaequalis</i>)	<12-23" 24-47" 48"+	5
Conifers, grown in commercial nurseries, plantations, and forest (including Christmas tree farms)	Root Rot (<i>Phytophthora</i> spp. including <i>P. ramorum</i> , <i>P. cinnamomi</i>)		7
			9
Crop Trees	Disease	Plant Size (DBH")	Rate (ml/DBH")
Avocados	Root Rot (<i>Phytophthora cinnamomi</i> , <i>P. citricola</i>)	<12-23" 24-47" 48"+	5
Citrus (mature trees)	Root, Foot and Collar Rot (<i>Phytophthora</i> spp. including <i>P. nicotinae</i> , <i>P. citrophthora</i>)		7
Coconuts	Bud – Nut Fall (<i>Phytophthora palmivora</i>)		9
Apples, Pears, Loquats, Quince	Fire Blight (<i>Erwinia amylovora</i>); Apple Scab (<i>Venturia inaequalis</i>); Black Spot (<i>Diplocarpon rosae</i>)		
Tree nuts such as Almonds, Walnuts	Root and Collar Rot (<i>Phytophthora</i> spp.)		

Sudden Oak Death

Use PHOSPHO-jet for effective control of *Phytophthora* (Sudden Oak Death, *Phytophthora ramorum*), in landscapes. Apply PHOSPHO-jet to Oaks (Black, Canyon, Coast, Live, Shreve) and Tan Oak.

Make applications before disease development and in conjunction with good cultural management practices. Do not exceed indicated application rates or apply more frequently than stated on label or tree injury may occur. Do not apply to trees that are heat or moisture stressed.

PHOSPHO-jet Application for Oaks [In California]

Landscape Applications	Disease	Rate
Oak (<i>Quercus</i> spp.) including Black, Canyon, Coast, Live, Shreve; Tan Oak	Sudden oak death <i>Phytophthora ramorum</i>	10 ml per 6 inch circumference (3.5 ml PHOSPHO-jet and 6.5 ml water)

CALCULATING APPLICATION RATE AND MIXING INSTRUCTIONS

The dilution rate is 1 part PHOSPHO-jet to 2 parts water. One injection of 10 ml of the PHOSPHO-jet /water solution is used per 6 inches of trunk circumference measured at 4 feet above the soil line.

In order to determine the application rate per tree:

- 1) Measure the trunk circumference 4 feet above the soil line.
- 2) Divide the number of inches of circumference by 6 to determine the number of injection sites.
- 3) Each 10 ml solution injection will have 3.5 ml PHOSPHO-jet and 6.5 ml water.
- 4) Multiply the number of injection sites by 3.5 to determine the amount of PHOSPHO-jet needed.
- 5) Multiply the number of injection sites by 6.5 to determine the amount of water needed.
- 6) Fill the tank with the water before adding PHOSPHO-jet.
- 7) Add PHOSPHO-jet slowly to the tank to reach the total amount of solution desired. (Total volume should equal number of injection sites x 10 ml.) Close and gently agitate to mix.

Example: A trunk has a circumference of 48". Dividing by 6 = 8 injection sites. Multiplying 8 by 3.5 = 28 ml PHOSPHO-jet. Multiplying 8 by 6.5 = 52 ml water. Therefore, prepare a treatment solution with 28 ml PHOSPHO-jet added to 52 ml of water for a total volume of 80 ml (8 injection sites of 10 ml each).

For multiple or asymmetrical trunks, measure the tree canopy at the drip line. The application rate is one 10ml injection per yard of canopy diameter.

Example: If the canopy diameter is 18 feet (6 yards), there will be 6 injection sites. Prepare a treatment solution with 21 ml PHOSPHO-jet (6 x 3.5 ml) added to 39 ml of water (6 x 6.5 ml) for a total volume of 60 ml (6 injection sites of 10 ml each).

Note: 324 ml (11 fl. oz) PHOSPHO-jet + 624 ml (21 fl. oz) water makes one quart of solution.

Arborjet Injection Procedures

General Guidelines:

Measure the tree **diameter** at chest height (54" from ground) in inches to find the Diameter at Breast Height (DBH). If measuring circumference, divide this number by three to determine Diameter at Breast Height (DBH).

Make applications to trees in full leaf. Alternatively, apply prior to bud break in spring or after leaf senescence (coloration or drop) in fall. Moist soil conditions and moderate temperatures (i.e., >40 and <90 °F) favor transpiration and are optimal for injection uptake.

Drill injection sites into the trunk or root flare (i.e., buttress) area, generally 6-8" from the soil level and 6" apart around the circumference of the tree.

For *Phytophthora* (Sudden Oak Death, *Phytophthora ramorum*), inject every 6 inches around trunk circumference measured at 4 feet above the soil line.

Basic Arborjet Injection Procedures:

Drill 5/8" deep into the sapwood using the appropriate sized drill bit (7/32", 9/32" or 3/8" dia.). Drill at a 90 degree angle to the stem (i.e., straight into the sapwood). Avoid drilling into dead, dying or diseased tissue, or tissue with visible injury or cracks. Use clean and sharp drill bits. Initially apply no pressure to the drill; the bit will naturally cut through the bark. It will stop penetrating when it meets the harder sapwood. Next apply pressure to the drill to cut 5/8" into the sapwood.

Insert an Arborplug, and tap in using the set tool and mallet. Use the #3 (9/32" d) or #4 (3/8" d) Arborplug in hardwoods; in conifers, use the #4 Arborplug. Using the injection needle, pierce the internal septum to start the injection process. Shut off and remove the injection needle upon completion.

Resinous Conifers In resinous conifers, such as pine and spruce insert the injection needle and open to start liquid flow immediately after inserting the Arborplug into the sapwood. A delay may reduce uptake due to resin flow.

Monocots

Inject into the trunk into lignified (hardened, woody) tissues typically within 2-3 ft. of the soil. Drill into the stem 4" deep using the 3/8" drill bit. Insert a #4 Arborplug™. Inject through the Arborplug. Only one injection site is needed.

WHEN TO TREAT / TIMING OF STEM INJECTION APPLICATIONS

Tree Health and Growing Conditions:

Best results are obtained when treatments are applied prior to infection. Treat trees when foliar symptoms (e.g., spot, defoliation, dieback) affect less than 10% of the canopy. Anticipate early season foliar infections, by treating prior to bud break (for example, apple scab).

Phytophthora root rot occurs most frequently in poorly drained and compacted soils. Susceptible species are at risk of infection following heavy precipitation or irrigation. Trees growing in low lying areas are also at risk of disease. Treat as early as possible in the infection cycle for best tree response.

For optimal uptake, apply when soil is moist, soil temperatures are above 45°F, ambient temperatures are between 40° to 90°F, and during the 24 hour period when transpiration is greatest, typically before 2:00 PM. Applications to drought or heat stressed trees may result in injury to tree tissue, poor treatment and subsequent control. Watering the trees prior to injection may enhance the uptake of PHOSPHO-jet.

RESTRICTIONS

- ✓ Do not inject trees more than once annually unless otherwise indicated
- ✓ Not recommended for newly planted (non-established) trees.
- ✓ DO NOT inject drought stressed trees.
- ✓ Do not treat trees that are damaged by herbicides.
- ✓ Do not inject trees within two weeks of any other spray or soil chemical treatment.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE:

Keep this product in containers stored upright and secured with the original closure. Do not store this product near any heat source. Do not store near any strong oxidants. If transfer to another container becomes necessary, ensure that the container is clearly labeled, the container is a type suitable for the product, and is clean and free of other materials. Keep from freezing.

CONTAINER HANDLING:

Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. If partly filled: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

NOTICE OF WARRANTY

ARBORJET, Inc makes no warranty of fitness of this product for any other purpose, beyond its uses under normal conditions in keeping with the statements made on this label.

Supplemental Label

PHOSPHO-jet Application Rates for Micro-injection Devices

See product label for application rate information.

Air/Hydraulic Micro-Injection Application

To inject, set the primary regulator to 75 PSI, charge the Dose-Sizer by pulling back on Dose-Sizer knob after priming, and apply the specified dose equally into the preset Arborplug.

QUIK-jet Micro-Injection Application

To Micro-Inject, set the Arborjet Tree Micro-Injector to the 5 ml setting. Draw formulation into the injector cylinder and squeeze handle to deliver the shot. Repeat until the full dose per injection site is delivered.

PHOSPHO-jet APPLICATION RATES for Arborjet Micro-Infusion™ (i.e., Tree I.V.) Applications

Tree Size DBH"	# Injection sites	Rate mL/DBH"	Treatment Solution	
			PHOSPHO-jet mLs/tree size (avg.) (1 part)	Water (2 parts)
6-8"	4	5	35	70
9-11"	5	5	50	100
12-14"	7	5	65	130
15-17"	8	5	80	160
18-20"	10	5	95	190
21-23"	11	5	110	220
24-26"	13	7	175	350
27-29"	14	7	196	392
30-32"	16	7	217	434
33-35"	17	7	238	476
36-38"	19	7	259	518
39-41"	20	7	280	560
42-44"	22	7	301	602
45-47"	23	7	322	644
48-50"	25	9	441	882
51-53"	26	9	468	936
54-56"	28	9	495	990
57-59"	29	9	522	1044
60-62"	31	9	549	1098
63-65"	32	9	576	1152
66-68"	34	9	603	1206
69-71"	35	9	630	1260

CLEAN-UP

IMPORTANT! It is critical to rinse the Arborjet Injection System thoroughly after use. Use **CLEAN-jet** or soap and water. Residues left in the device will corrode the internal components and void equipment warranty.

Receipt for Section 3

S: 906078

Resubmission: ☐ Yes ☒ No

Regulatory Type: Product Registration - Section 3 /

Fee For Service: ☐ Yes ☒ No

Application Type: Amendment

Billable: ☐ Yes ☒ No

Company: 74578 ARBORJET



Risk Manager: Biologicals & Pollution Prevention Division, PM Team 91

Product #: 74578-3 Product Name: PHOSPHO-JET

Override#:

Me Too Section3: Me Too Product Name:

Application Date: 27-Oct-2011

OPP Rec'd Date: 28-Oct-2011

Front End Date: 28-Oct-2011

Risk Manager Send Date: 01-Nov-2011

FFS Due Date:

Negotiated Due Date:

OPP Target Date:

Fast Track: ☐

New Ingredient: ☐

Receipt Description:

Label amendment

Form A: ☐ Signature Date:

Form B: ☐

New Ingredient Request Date:

New Ingredient Received Date:

Signature Date:

Print Letter

Enter More Information

Tracking

Receipt Content

Des

Paper Label

View/Edit

MKA
Received
11/03/11



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

November 1, 2011

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

DONNA LEVENTHAL
DELTA ANALYTICAL CORPORATION
ARBORJET
12510 PROSPERITY DRIVE, SUITE 160
SILVER SPRING, MD 20904-

PRODUCT NAME: PHOSPHO-JET
COMPANY NAME: ARBORJET
OPP IDENTIFICATION NUMBER:
EPA FILE SYMBOL: 74578-3
EPA RECEIPT DATE: 10/28/11

SUBJECT: RECEIPT OF AMENDMENT

DEAR REGISTRANT:

The Office of Pesticide Programs has received your application for an amendment and it has passed an administrative screen for completeness.

During the initial screen we determined that the application appears to qualify for fast track review. The package will now be forwarded to the Product Manager for review to determine its acceptability for fast track status.

If you have any questions, please contact Biologicals & Pollution Prevention Division, PM Team 91, at (703) 308-8733.

Sincerely,

H. K. Maone
Front End Processing Staff
Information Services Branch
Information Technology & Resources Management Division

Fee for Service

{9060766~

This package includes the following

- ☐ New Registration
- ☒ Amendment

- ☐ Studies? ☐ Fee Waiver?
- ☐ volpay % Reduction: _____

for Division

- ☐ AD
- ☒ BPPD
- ☐ RD

Risk Mgr. 91

Receipt No.

S-

906076

EPA File Symbol/Reg. No.

74578-3

Pin-Punch Date:

10/28/2011

☒ This item is NOT subject to FFS action.

Action Code:

Requested:

Granted:

Amount Due: \$ _____

Parent/Child Decisions:

☐ Inert Cleared for Intended Use

☐

Uncleared Inert in Product

Reviewer: Andrew Bryce Land

Date: 11/1/11

Remarks:

**EPA**

United States
Environmental Protection Agency
 Washington, DC 20460

☐ Registration
☐ Amendment
☒ Other

OPP Identifier Number

AMEND**Application for Pesticide - Section I**

1. Company/Product Number 74578-3	2. EPA Product Manager Linda Hollis, Chief Biochemical Pesticides Branch	3. Proposed Classification <input type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) ARBORJET, INC. / PHOSPHO-jet	PM# Biopesticides and Pollution Prevention Division	
5. Name and Address of Applicant (Include ZIP Code) ARBORJET, INC. c/o Delta Analytical Corp. 12510 Prosperity Dr. Suite 160 Silver Spring, MD 20904 <input type="checkbox"/> Check if this is a new address		6. Expedited Review. In accordance with FIFRA Section 3(c)(3)(b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____

Section - II

☒ Amendment - Explain below
☐ Resubmission in response to Agency letter dated _____
☐ Notification - Explain below.

☐ Final printed labels in response to Agency letter dated _____
☐ "Me Too" Application.
☐ Other - explain below.

Explanation: Use additional page(s) if necessary. (For section I and Section II.)
Label Amendment to update directions for use.

Section - III

1. Material this Product will be Packaged in:

Child-Resistant Packaging <input type="checkbox"/> Yes* <input type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	2. Type of Container <input type="checkbox"/> Metal <input type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____
* Certification must be submitted.		If "Yes," Unit Package wgt. No. per container	If "Yes," Unit Package wgt. No. per container

3. Location of Net Contents Information
☐ Label ☐ Container

4. Size(s) of Retail Container

5. Location of Label Direction
☐ On Label
☐ On Labeling accompanying product

6. Manner in Which Label Is Affixed to Product
☐ Lithograph ☐ Paper glued ☐ Stenciled ☐ Other _____

Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)

Name Cristina Griffin	Title Agent for Arborjet Inc.	Telephone No. (Include Area Code) 303-680-7971
---------------------------------	---	--

Certification
 I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any kind of knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

2. Signature 	3. Title Agent for Arborjet Inc.	6. Date Application Received (Stamped)
4. Typed Name Cristina Griffin	5. Date October 27, 2011	

EPA

**United States
Environmental Protection Agency
Washington, DC 20460
Formulator's Exemption Statement
(40 CFR 152.85)**

Applicant's Name and Address ARBORJET, Inc. c/o Delta Analytical Corp. 12510 Prosperity Drive, Suite 160 Silver Spring, MD 20904	EPA File Symbol/Registration Number 74578-3
	Product Name PHOSPHO-jet
	Date of Confidential Statement of Formula (EPA Form 8570-4) 12/13/05

As an authorized representative of the applicant for registration of the product identified above, I certify that:

- (1) This product contains the following active ingredient(s):**

mono-and di-potassium salts of phosphorous acid

- (2) Of these, each active ingredient listed in paragraph (4) is present solely as the result of the use of that active ingredient in the manufacturing, formulation or repackaging another product which contains that active ingredient which is registered under FIFRA Section 3, is purchased by us from another producer, and is labeled for at least each use for which my product is proposed to be labeled.**

- (3) Indicate by checking (A) or (B) below which paragraph applies:**

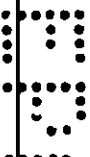

☐ (A) An accurate Confidential Statement of Formula (EPA FORM 8570-4) for the above identified product is attached to this statement. That formula statement indicates, by company name, registration number, and product name, the source of the active ingredient(s) listed in paragraph (1).

OR

X (B) The Confidential Statement of Formula (CSF) (EPA Form 8570-4) referenced above and on file with the EPA is complete, current, and accurate and contains the information required on the current CSF.

- (4) The following active ingredients in this product qualify for the formulator's exemption.**

Source

Active Ingredient	Product Name	Registration Number
mono-and di-potassium salts of phosphorous acid		<div style="text-align: right;">  </div>
Signature 	Name and Title Cristina Griffin, Agent for ARBORJET, Inc.	Date 10/27/11

EPA Form 8570-27 (Rev. 8-95)

*U.S. GPA: 1995-386-820/20413

White - EPA copy
Yellow - Applicant copy

g:\epa\formula

PPD Label Amendment Checklist

Fast Track ☒ and PRIA Actions B650 ☐, B680 ☐, B681 ☐, B750 ☐, B890 ☐ & B900 ☐

EPA Reg. No.: 74578-3

RAL: M. Adams

Application Date: 10/27/11

#	Check list Item	Yes	No
1.	Application Form (EPA Form 8570-1) - signed & complete, including package type? IF NO, STOP! Call applicant and have them correct application and resubmit.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2.	Final printed labeling received for previous action? IF NO, STOP! E-mail applicant and request final printed labeling (FPL).	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3.	Does the registration notice have terms/conditions (ex: storage stability data)? If so have the terms/conditions been met?	<input type="checkbox"/>	<input type="checkbox"/>
4.	If new use sites are being added, are they subject to OPP's process for public involvement in pesticide registration actions?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
5.	Data and Data Matrix present. (EPA Form 8570-35) NA <input type="checkbox"/> If Fast Track, check to see if original registration supported by data, formulators exemption, etc.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
a.	Using Selective Method? [IF NO, SKIP to item 4 and note that data matrix should be used for the cite-all method to indicate the companies to whom offers of compensation were made.]	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b.	Complete Data Matrix supporting both the product registration and the proposed amendment. Minimum Data Matrix for registration includes: Product specific Acute Toxicity and Product Chemistry data, plus Efficacy data for public health pests claimed on label.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c.	Adequate product specific data?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d.	Registered source used for active ingredient? IF YES, SKIP to ITEM 4. (If active ingredient is from a registered source (manufacturing-use product), generic data should be satisfied by registered source.) IF NO or if use not supported by registered source, generic data is necessary.	<input type="checkbox"/>	<input type="checkbox"/>
e.	If new data submitted: data passed PR Notice 86-5 for formatting and MRID # assigned?	<input type="checkbox"/>	<input type="checkbox"/>
f.	Public copy of Data Matrix provided? (PRN 98-5)	<input type="checkbox"/>	<input type="checkbox"/>
6.	Certification with Respect to Citation of Data present. (EPA Form 8570-34): See 40 CFR 152.80-98 and PR Notice 98-5 [If no data are required or submitted, a Certification with Respect to Citation of Data form isn't needed. This is often true for minor amendments.] NA <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
a.	Did applicant check a Method of Support?	<input type="checkbox"/>	<input type="checkbox"/>
b.	General Offer to Pay checked for Cite-all Method or Cite-all under Selective Method?	<input type="checkbox"/>	<input type="checkbox"/>
c.	Is the form signed and dated?	<input type="checkbox"/>	<input type="checkbox"/>
d.	Check form and Data Matrix. Are Exclusive Use data cited from other sources? IF YES, is the required authorization letter included in application? NA <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.	Label(s) Review <i>M. Adams</i> Date of Label Review: 02/07/12	<input type="checkbox"/>	<input type="checkbox"/>
a.	Label(s) in conformance with current <i>Label Review Manual</i> and appropriate REDS.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b.	Labeling statements and claims are supported by Acute Toxicity, Product Chemistry data (or acceptable waivers). Acceptable efficacy studies support public health pests claimed on label.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c.	Nominal concentration of active ingredient shown in ingredients statement.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d.	Viability included as sub-statement of Ingredient Statement (if live microbial, i.e., cfu/gram).	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e.	Storage and disposal instructions agree with container types listed on application form.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f.	Unique Product Name for Same Company (Check OPPIN).	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g.	Does CSF list peanuts, tree nuts, milk, soybeans, eggs (including putrescent eggs), fish, crustacea, or wheat commodities? IF YES, RAL must evaluate label use directions for compliance with 40 CFR 180.1071.	<input checked="" type="checkbox"/>	<input type="checkbox"/>

h.	Does label bear "National Organic <u> </u> gram" (PR Notice 2003-1) or OMRI cla			<input checked="" type="checkbox"/>
	If YES, National Organic Program or OMRI claims approved by Chris Pfiefer?	NA	<input checked="" type="checkbox"/>	
i.	Labeling is acceptable. Corrections or changes are NOT necessary.		<input checked="" type="checkbox"/>	
j.	Comments:			

Internal BPPD Guidance Document — Other Items May be Required

File Symbol: 745783 **Label Review** Date: 02/27/12 Reviewer: M Adams

[Site/Use]	[Res /Ag <u>Both</u>] [Food /Non-Food /Both]				
[Tox Categories:]	[AcOral: /AcDerm: /AcInhl: /EyeIrr: /SkinIrr: DermSens:]				
Label Requirement	Acceptable	Not Acceptable	N/A	Comments Recommendations	LRM3
Restricted Use Pesticide	_____	_____	---		Ch 6
Product Name	✓				Pg 12-3
Compny Name and Info	✓				Pg 15-1
Identification Numbers	✓				Ch 14
Net Contents	✓				Ch 17
Ingredients Statement	✓				Ch 5
Label Claims	✓				Pgs 4-5, 5-7 11-10 & Ch 12
Alternate Formula					5-12

Precautionary Statements					
Label Requirement	Acceptable	Not Acceptable	N/A	Comments Recommendations	LRM3
KOROC	✓				3-1 & 9 7-3 & 4
Signal Word	✓				Ch 3 Ch 7 Ch 10
General Heading >PRECAUTIONARY STATEMENTS=	✓				Ch 7
First Aid (PRN 20001-1)	✓				Ch 3 & 7

Hazards to Humans and Domestic Animals	✓				Ch 3, 7-3
PPE (WPS) Engineering Controls	✓				Ch 7, Pg 7-12 Pgs 10-4, 15
User Safety Requirements	✓				Ch 10
User Safety Recommendations	✓				Ch 10
Environmental Hazards	✓				Ch 8
Physical and Chemical Hazards	✓				Pg 3-4 Ch 9

Directions for USE (FIFRA Text, WPS plus Storage and Disposal)					
Label Requirement	Acceptable	Not Acceptable	N/A	Comments Recommendations	LRM3
Header >Directions for Use=	✓				10-16
Violation of Federal Law text	✓				10-26, 11-7
WPS Text (PPE)	✓				Ch 10, 7-1 7-11
Non-WPS Text	✓				7-12, Ch 10
Pesticide Storage and Disposal	✓				11-16, Ch 13
Container Disposal & Batch Code	✓				PRN 2007-4

Directions for Use (General Instructions and Information)					
Label Requirement	Acceptable	Not Acceptable	N/A	Comments Recommendations	LRM3
General Instructions and Sub-Header	✓				
Chemigation / Prohibition					PRN
REI	✓				Pg 10-20

Directions for Use (General Instructions and Information)					
Label Requirement	Acceptable	Not Acceptable	N/A	Comments Recommendations	LRM3
General Info. (non-site specific info. on uses, pests, mixing, and loading, tank mixing, etc.)	✓				
General Precautions and Restrictions	✓				
Directions for Use					
Directions for Application	✓				
Warranty Information					
Consistency with label instructions	✓				12-6
Not false or misleading	✓				
<p>"The warranty section contains an overly broad statement concerning limitations of liability. As such, this statement may be misleading and may constitute misbranding under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). It is suggested that the existing statement be preceded by the phrase, to the extent allowable by state law, or otherwise qualified to make it clear that this warranty is not intended to be a statement of law which implies that the buyer has no legal rights to recover damages from the manufacturer if he/she suffered a loss or injury from the product and concludes that it would be futile to pursue what might in reality be a valid claim."</p>					

Material to be added to an e-Jacket/Jacket

Reg. No. 44578-3

1. ☐ Placement within the e-Jacket/jacket:

☒ Default: (chronological, top/newest)

☐ Description: (PDF page number, i.e., "before page 45")

Label Amendment - Acceptable
Phospho - Jet

2. ☒ Send to Data Extraction contractors this material:

☒ Newly stamped accepted label

- See attached

☐ Notification

☐ New CSF

☐ Other: _____

3. Attach this coversheet to the top of the material or jacket. It must be well organized and clipped together, NOT STAPLED. Then give the material with this coversheet to staff in the Information Services Center (Room S-4900).

Reviewer's Name: Linda Roberts

Phone: 703-308-0045 Division: BPPD

Date: 1-5-09

DEC 9 2008

Ms. Cristina Griffin
Agent for Arborjet, Inc
12510 Prosperity Drive
Suite 160
Silver Spring, MD 20904

Subject: Arborjet, Inc.'s PHOSPHO-jet
EPA Reg. Number 74578-3
Label Amendment to change wording of directions
Application Dated: September 12, 2008
(EPA Submission No.: 836044)

Dear Ms. Griffin:

The amendment referred to above, submitted in connection with registration under FIFRA section 3(c)(5) is acceptable provided that you:

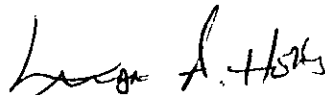
1. Submit and/or cite all data required for registration/reregistration of your product under FIFRA section 3(c)(5) when the Agency requires all registrants of similar products to submit such data.
2. Submit five (5) copies of your final printed labeling before you release the product for shipment. Final printed labeling means the label or labeling of the product when distributed or sold. Clearly legible reproductions or photo reductions will be accepted for unusual labels, such as those silk-screened directly onto glass or metal containers or large bags or drum labels.

If these conditions are not complied with, the registration will be subject to cancellation in accordance with FIFRA section 6(e). Your release for shipment of the product bearing the amended labeling constitutes acceptance of these conditions.

If you have any questions contact Ms. Linda Roberts at 703-308-0045 or by e-mail at Roberts.Linda@epa.gov

A stamped copy of the label is enclosed for your records.

Sincerely,



Linda A. Hollis, Branch Chief
Biochemical Pesticides Branch
Biopesticides and Pollution
Prevention Division (7511P)

Enclosure: Stamped Label

CONCURRENCES

SYMBOL	7511P	7511P					
SURNAME	Roberts	Brayceland					
DATE	12/30/08	12/30/08					

Master label including Sub-label A – Commercial Agricultural Uses and
Sub-label B – Residential Uses

Sub-label A – Commercial Agricultural Uses

[company logo]

PHOSPHO-jet

[For Use Against Sudden Oak Death] [in California]
[Systemic Fungicide] [Arboriculture in Motion] [Diverse Pest Control]
[Systemic Fungicide for Micro-Infusion]

ACCEPTED
DEC 9 2008

Under the Federal Insecticide, Fungicide,
and Rodenticide Act, as amended, for
the pesticide registered under
EPA Reg. No. 74578-3

Systemic fungicide for the suppression of [various plant diseases including root rot in avocado and citrus, bud rot and nut fall in coconut, black spot, scab, fire blight in apple, anthracnose in mango, sycamore, and dogwood,] [Phytophthora (causative of Sudden Oak Death) in oak,] [and for effective control of Phytophthora and Pythium diseases associated with stem and Canker Blight, Beech Decline, and general tree declines in landscapes.]

ACTIVE INGREDIENTS: Mono-and di-potassium salts of Phosphorous Acid..... 45.8%
OTHER INGREDIENTS:..... 54.2%
TOTAL..... 100.0%

Contains: 5.17lbs/gallon of the active ingredients, mono- and di-potassium salts of Phosphorous acid
Equivalent to 3.35 lbs Phosphorous acid/gallon

EPA Reg. No. 74578-3
EPA Est. No. 74578-MA-001

Net Contents:
[1 Quart], [1 Gallon], [5 gallons], [20 gallons], [55 gallons]

Manufactured [by][for]:
ARBORJET, Inc.
99 Blueberry Hill Road
Woburn, MA 01801
(781) 721-0795

KEEP OUT OF REACH OF CHILDREN
CAUTION

FIRST AID	
IF SWALLOWED:	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Have person sip a glass of water if able to swallow.• Do not induce vomiting unless told to do so by a poison control center or doctor.• Do not give anything by mouth to an unconscious person.
IF IN EYES:	<ul style="list-style-type: none">• Hold eye open and rinse slowly and gently with water for 15-20 minutes.• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.• Call a poison control center or a doctor for treatment advice.
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water for 15-20 minutes.• Call a poison control center or a doctor for treatment advice.
IF INHALED:	<ul style="list-style-type: none">• Move person to fresh air.• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferable mouth-to-mouth, if possible.• Call a poison control center or a doctor for treatment advice.
Have the product container of label with you when calling a poison control center or doctor or going for treatment. You may also contact the National Poison Control Hotline at 1-800-222-1222, 24 hours a day, 7 days a week.	

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION. Harmful if swallowed, inhaled or absorbed through skin. Causes moderate eye irritation. Avoid breathing vapors or spray mist. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear protective eyewear, long pants and long-sleeved shirt, waterproof gloves, shoes plus socks.

Follow manufacturer's instructions for maintaining/cleaning personal protective equipment (PPE). If no such instructions for washables, use hot water and detergent. Keep and wash PPE separately from other laundry.

When handlers use closed systems, aircraft or enclosed cabs in a manner that meets the requirements listed in the worker protection standard (WPS) for agricultural pesticides (40 CFR 170.240 (d) (4-6), the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before drinking, eating, chewing gum, using tobacco, or using the toilet.
- Remove PPE clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Read entire label before using this product.

Do not apply this product in any way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide registration.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Workers Protection Standard, CFR 40 part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours.

PPE required for early entry to treated areas that are permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soils or water, is: coveralls, waterproof gloves, shoes plus socks, and protective eyewear.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements of this box apply to uses of this product that are not within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR part 170.) The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

Do not enter treated areas without protective clothing until sprays have dried.

GENERAL APPLICATION INSTRUCTIONS

This product is for use with the **ARBORJET TREE INJECTION SYSTEMS** or those systems that meet the label and dosage requirements. Follow manufacturer's directions for use.

Ornamental, Forest, Conifers, and Crop Trees

CALCULATING APPLICATION RATE AND MIXING INSTRUCTIONS (for micro-injection; for other methods see supplemental information)

- 1) To determine the application rate, refer to Table 1. Identify plant size by determining tree diameter in inches at breast height (DBH") (measured at approximately 54" above the soil line). (If measuring tree circumference divide by 3 to obtain the DBH".)
- 2) Multiply the DBH" by the corresponding amount in the rate column to determine the application rate appropriate for plant size.
- 3) 1 part PHOSPHO-jet is diluted with 2 parts water. Determine the amount of water to be added by multiplying the ml PHOSPHO-jet (obtained in step #2 above) by 2.
- 4) Fill the tank with the water before adding PHOSPHO-jet.
- 5) Add PHOSPHO-jet slowly to the tank, close and gently agitate to mix.

Example: To treat a 10" DBH oak for root rot, see Table 1. Add 50 ml of PHOSPHO-jet (10" DBH x 5ml) into 100 ml (2 x 50 ml) water for a total injection volume of 150 ml. Inject 30 ml of the PHOSPHO-jet/water solution every 6" of trunk circumference as directed in Supplemental Label Arborjet Injection Procedures.

Table 1 PHOSPHO-jet Use and Application Rates

Plant	Disease	Plant Size (DBH")	Rate (ml/DBH")
Ornamental & Forest Trees	Root Rot (<i>Phytophthora</i> spp. including <i>P. ramorum</i> , <i>P. cinnamomi</i> , <i>P. palmivora</i> , <i>P. cactorum</i>), Anthracnose, Apple scab (<i>Venturia inaequalis</i>)	<12" 12-23" 24-35" 36"+	5 7 9 11
Conifers, grown in commercial nurseries, plantations, and forest (including Christmas tree farms)	Root Rot (<i>Phytophthora</i> spp. including <i>P. ramorum</i> , <i>P. cinnamomi</i>)		
Crop Trees	Disease	Plant Size (DBH")	Rate (ml/DBH")
Avocados	Root Rot (<i>Phytophthora cinnamomi</i> , <i>P. citricola</i>)	6-8"	4
Citrus (mature trees)	Root, Foot and Collar Rot (<i>Phytophthora</i> spp. including <i>P. nicotinae</i> , <i>P. citrophthora</i>)	9-11"	5
Coconuts	Bud - Nut Fall (<i>Phytophthora palmivora</i>)	12-14"	6
Apples, Pears, Loquats, Quince	Fire Blight (<i>Erwinia amylovora</i>); Apple Scab (<i>Venturia inaequalis</i>); Black Spot (<i>Diplocarpon rosae</i>)	15-23"	7
Tree nuts such as Almonds, Walnuts	Root and Collar Rot (<i>Phytophthora</i> spp.)	24-32"	8
		33"+	9

Sudden Oak Death*

Use PHOSPHO-jet for effective control of *Phytophthora* (Sudden Oak Death, *Phytophthora ramorum*), in landscapes, plantation trees, golf courses, forests and parks. Apply PHOSPHO-jet to Oaks (Black, Canyon, Coast, Live, Shreve) and Tan Oak.

Make applications before disease development and in conjunction with good cultural management practices. Do not exceed indicated application rates or apply more frequently than stated on label or tree injury may occur. Do not apply to trees that are heat or moisture stressed.

PHOSPHO-jet Application for Oaks [in California]

Landscape, Golf Course, Plantation, Forest, and Park Applications	Disease	Rate
Oak (<i>Quercus</i> spp.) including Black, Canyon, Coast, Live, Shreve; Tan Oak	Sudden oak death <i>Phytophthora ramorum</i>	10 ml per 6 inch circumference (3.5 ml PHOSPHO-jet and 6.5 ml water)

*Use in California limited to Oaks (Black, Canyon, Coast, Live, Shreve) and Tan Oak using micro-injection system only.

CALCULATING APPLICATION RATE AND MIXING INSTRUCTIONS

The dilution rate is 1 part PHOSPHO-jet to 2 parts water. One injection of 10 ml of the PHOSPHO-jet /water solution is used per 6 inches of trunk circumference measured at 4 feet above the soil line.

In order to determine the application rate per tree:

- 1) Measure the trunk circumference 4 feet above the soil line.
- 2) Divide the number of inches of circumference by 6 to determine the number of injection sites.
- 3) Each 10 ml solution injection will have 3.5 ml PHOSPHO-jet and 6.5 ml water.
- 4) Multiply the number of injection sites by 3.5 to determine the amount of PHOSPHO-jet needed.
- 5) Multiply the number of injection sites by 6.5 to determine the amount of water needed.
- 6) Fill the tank with the water before adding PHOSPHO-jet.
- 7) Add PHOSPHO-jet slowly to the tank to reach the total amount of solution desired. (Total volume should equal number of injection sites x 10 ml.) Close and gently agitate to mix.

Example: A trunk has a circumference of 48". Dividing by 6 = 8 injection sites. Multiplying 8 by 3.5 = 28 ml PHOSPHO-jet. Multiplying 8 by 6.5 = 52 ml water. Therefore, prepare a treatment solution with 28 ml PHOSPHO-jet added to 52 ml of water for a total volume of 80 ml (8 injection sites of 10 ml each).

For multiple or asymmetrical trunks, measure the tree canopy at the drip line. The application rate is one 10ml injection per yard of canopy diameter.

Example: If the canopy diameter is 18 feet (6 yards), there will be 6 injection sites. Prepare a treatment solution with 21 ml PHOSPHO-jet (6 x 3.5 ml) added to 39 ml of water (6 x 6.5 ml) for a total volume of 60 ml (6 injection sites of 10 ml each).

Note: 324 ml (11 fl. oz) PHOSPHO-jet + 624 ml (21 fl. oz) water makes one quart of solution.

WHEN TO TREAT / TIMING OF STEM INJECTION APPLICATIONS

Tree Health and Growing Conditions:

Best results are obtained when treatments are performed prior to infection. Treat trees when foliar symptoms (e.g., spot, defoliation, dieback) affect less than 10% of the canopy. Anticipate early season foliar infections, by treating prior to bud break (for example, apple scab).

Phytophthora root rot occurs most frequently in poorly drained and compacted soils. Susceptible species are at risk of infection following heavy precipitation or irrigation. Trees growing in low lying areas are also at risk of disease. Treat as early as possible in the infection cycle for best tree response.

For optimal uptake, apply when soil is moist, soil temperatures are above 45°F, ambient temperatures are between 40° to 90°F, and during the 24 hour period when transpiration is greatest, typically before 2:00 PM. Applications to drought or heat stressed trees may result in injury to tree tissue, poor treatment and subsequent control. Watering the trees prior to injection may enhance the uptake of PHOSPHO-jet.

COMPATIBILITY

PHOSPHO-jet is compatible with most products used in agriculture. However, individual crop sensitivity to these mixtures may vary. Mixtures of PHOSPHO-jet with copper products are not always compatible or cause phytotoxicity to some plants. If these combinations or others have not been used previously, do not tank mix without first testing the compatibility of the tank mix. Do not apply tank mixture without first assessing its safety to the crop (phytotoxicity). Tank mix PHOSPHO-jet with fertilizers only if crop safety has been established and the PHOSPHO-jet use rates are followed.

Due to PHOSPHO-jet's acidic nature, do not use acidifying-type compatibility agents. If adjuvants are used, test them before use to confirm compatibility with PHOSPHO-jet.

Use a jar test to confirm compatibility with PHOSPHO-jet. In a clean jar using the same water source that is normally used to fill spray tank, add the appropriate quantity of water and mix thoroughly. Let stand for 3 minutes. If mixture remains in solution or is remixed readily, the tank mixture is compatible.

Spray the solution that results from the above compatibility test onto a few plants until foliage is visibly wet and inspect for visual effects of phytotoxicity (leaf burn) 3-7 days later.

RESTRICTIONS

- ✓ Do not inject trees more than once annually unless otherwise indicated
- ✓ Not recommended for newly planted (non-established) trees.
- ✓ DO NOT inject drought stressed trees.
- ✓ Do not treat trees that are damaged by herbicides.
- ✓ Do not inject trees within two weeks of any other spray or soil chemical treatment.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE:

Keep this product in containers stored upright and secured with the original closure. Do not store this product near any heat source. Do not store near any strong oxidants. If transfer to another container becomes necessary, ensure that the container is clearly labeled, the container is a type suitable for the product, and is clean and free of other materials. Keep from freezing.

PESTICIDE DISPOSAL:

Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL:

Nonrefillable container. Do not reuse or refill this container. Triple rinse container (or equivalent) promptly after emptying.

[For containers small enough to shake (≤ 5 gallons)] Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container $\frac{1}{4}$ full with water and recap. Shake for 10 seconds. Pour rinsates into application equipment or a mix tank or store rinsates for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times.

[For containers too large to shake (> 5 gallons or 50 lbs.)] Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container $\frac{1}{4}$ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times.

Offer for recycling, if available.

NOTICE OF WARRANTY

ARBORJET, Inc makes no warranty of fitness of this product for any other purpose, beyond its uses under normal conditions in keeping with the statements made on this label.

[company logo]

PHOSPHO-jet

[For Use Against Sudden Oak Death] [in California]
[Systemic Fungicide] [Arboriculture in Motion] [Diverse Pest Control]
[Systemic Fungicide for Micro-Infusion]

Systemic fungicide for the suppression of [various plant diseases including root rot in avocado and citrus, bud rot and nut fall in coconut, black spot, scab, fire blight in apple, anthracnose in mango, sycamore, and dogwood,] [Phytophthora (causative of Sudden Oak Death) in oak,][and for effective control of *Phytophthora* and *Pythium* diseases associated with stem and Canker Blight, Beech Decline, and general tree declines in landscapes.]

ACTIVE INGREDIENTS: Mono-and di-potassium salts of Phosphorous Acid..... 45.8%
OTHER INGREDIENTS:..... 54.2%
TOTAL..... 100.0%

Contains: 5.17lbs/gallon of the active ingredients, mono- and di-potassium salts of Phosphorous acid
Equivalent to 3.35 lbs Phosphorous acid/gallon

EPA Reg. No. 74578-3
EPA Est. No. 74578-MA-001

Manufactured [by][for]:
ARBORJET, Inc.
99 Blueberry Hill Road
Woburn, MA 01801
(781) 721-0795

Net Contents:

- ☐ 1 Quart
- ☐ 1 Gallon
- ☐ 5 Gallons

KEEP OUT OF REACH OF CHILDREN
CAUTION

FIRST AID	
IF SWALLOWED:	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Have person sip a glass of water if able to swallow.• Do not induce vomiting unless told to do so by a poison control center or doctor.• Do not give anything by mouth to an unconscious person.
IF IN EYES:	<ul style="list-style-type: none">• Hold eye open and rinse slowly and gently with water for 15-20 minutes.• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.• Call a poison control center or a doctor for treatment advice.
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water for 15-20 minutes.• Call a poison control center or a doctor for treatment advice.
IF INHALED:	<ul style="list-style-type: none">• Move person to fresh air.• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferable mouth-to-mouth, if possible.• Call a poison control center or a doctor for treatment advice.
Have the product container of label with you when calling a poison control center or doctor or going for treatment. You may also contact the National Poison Control Hotline at 1-800-222-1222, 24 hours a day, 7 days a week.	

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION. Harmful if swallowed, inhaled or absorbed through skin. Causes moderate eye irritation. Avoid breathing vapors or spray mist. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Read entire label before using this product. For use in home gardens and ornamentals.

GENERAL APPLICATION INSTRUCTIONS

This product is for use with the **ARBORJET TREE INJECTION SYSTEMS** or those systems that meet the label and dosage requirements. Follow manufacturer's directions for use.

Ornamental, Conifers, and Fruit Trees

CALCULATING APPLICATION RATE AND MIXING INSTRUCTIONS

- 1) To determine the application rate, refer to Table 1. Identify plant size by determining tree diameter in inches at breast height (DBH") (measured at approximately 54" above the soil line). (If measuring tree circumference divide by 3 to obtain the DBH".)
- 2) Multiply the DBH" by the corresponding amount in the rate column to determine the application rate appropriate for plant size.
- 3) 1 part PHOSPHO-jet is diluted with 2 parts water. Determine the amount of water to be added by multiplying the ml PHOSPHO-jet (obtained in step #2 above) by 2.
- 4) Fill the tank with the water before adding PHOSPHO-jet.
- 5) Add PHOSPHO-jet slowly to the tank, close and gently agitate to mix.

Example: To treat a 10" DBH oak for root rot, see Table 1. Add 50 ml of PHOSPHO-jet (10" DBH x 5ml) into 100 ml (2 x 50 ml) water for a total injection volume of 150 ml. Inject 30 ml of the PHOSPHO-jet/water solution every 6" of trunk circumference as directed in Supplemental Label Arborjet Injection Procedures.

Table 1 PHOSPHO-jet Use and Application Rates

Plant	Disease	Plant Size (DBH")	Rate (ml/DBH")
Ornamental & Trees	Root Rot (<i>Phytophthora</i> spp. including <i>P. ramorum</i> , <i>P. cinnamomi</i> , <i>P. palmivora</i> , <i>P. cactorum</i>), Anthracnose, Apple scab (<i>Venturia inaequalis</i>)	<12"	5
		12-23"	7
		24-35"	9
Conifers	Root Rot (<i>Phytophthora</i> spp. including <i>P. ramorum</i> , <i>P. cinnamomi</i>)	36"+	11
Fruit Trees	Disease	Plant Size (DBH")	Rate (ml/DBH")
Avocados	Root Rot (<i>Phytophthora cinnamomi</i> , <i>P. citricola</i>)	6-8"	4
Citrus (mature trees)	Root, Foot and Collar Rot (<i>Phytophthora</i> spp. including <i>P. nicotinae</i> , <i>P. citrophthora</i>)	9-11"	5
		12-14"	6
Coconuts	Bud - Nut Fall (<i>Phytophthora palmivora</i>)	15-23"	7
Apples, Pears, Loquats, Quince	Fire Blight (<i>Erwinia amylovora</i>); Apple Scab (<i>Venturia inaequalis</i>); Black Spot (<i>Diplocarpon rosae</i>)	24-32"	8
		33"+	9
Tree nuts such as Almonds, Walnuts	Root and Collar Rot (<i>Phytophthora</i> spp.)		

Sudden Oak Death **

Use PHOSPHO-jet for effective control of *Phytophthora* (Sudden Oak Death, *Phytophthora ramorum*), in landscapes. Apply PHOSPHO-jet to Oaks (Black, Canyon, Coast, Live, Shreve) and Tan Oak.

Make applications before disease development and in conjunction with good cultural management practices. Do not exceed indicated application rates or apply more frequently than stated on label or tree injury may occur. Do not apply to trees that are heat or moisture stressed.

PHOSPHO-jet Application for Oaks [in California]

Landscape Applications	Disease	Rate
Oak (<i>Quercus</i> spp.) including Black, Canyon, Coast, Live, Shreve; Tan Oak	Sudden oak death <i>Phytophthora ramorum</i>	10 ml per 6 inch circumference (3.5 ml PHOSPHO-jet and 6.5 ml water)

**Use in California limited to Oaks (Black, Canyon, Coast, Live, Shreve) and Tan Oak.

CALCULATING APPLICATION RATE AND MIXING INSTRUCTIONS

The dilution rate is 1 part PHOSPHO-jet to 2 parts water. One injection of 10 ml of the PHOSPHO-jet /water solution is used per 6 inches of trunk circumference measured at 4 feet above the soil line.

In order to determine the application rate per tree:

- 1) Measure the trunk circumference 4 feet above the soil line.
- 2) Divide the number of inches of circumference by 6 to determine the number of injection sites.
- 3) Each 10 ml solution injection will have 3.5 ml PHOSPHO-jet and 6.5 ml water.
- 4) Multiply the number of injection sites by 3.5 to determine the amount of PHOSPHO-jet needed.
- 5) Multiply the number of injection sites by 6.5 to determine the amount of water needed.
- 6) Fill the tank with the water before adding PHOSPHO-jet.
- 7) Add PHOSPHO-jet slowly to the tank to reach the total amount of solution desired. (Total volume should equal number of injection sites x 10 ml.) Close and gently agitate to mix.

Example: A trunk has a circumference of 48". Dividing by 6 = 8 injection sites. Multiplying 8 by 3.5 = 28 ml PHOSPHO-jet. Multiplying 8 by 6.5 = 52 ml water. Therefore, prepare a treatment solution with 28 ml PHOSPHO-jet added to 52 ml of water for a total volume of 80 ml (8 injection sites of 10 ml each).

For multiple or asymmetrical trunks, measure the tree canopy at the drip line. The application rate is one 10ml injection per yard of canopy diameter.

Example: If the canopy diameter is 18 feet (6 yards), there will be 6 injection sites. Prepare a treatment solution with 21 ml PHOSPHO-jet (6 x 3.5 ml) added to 39 ml of water (6 x 6.5 ml) for a total volume of 60 ml (6 injection sites of 10 ml each).

Note: 324 ml (11 fl. oz) PHOSPHO-jet + 624 ml (21 fl. oz) water makes one quart of solution.

WHEN TO TREAT / TIMING OF STEM INJECTION APPLICATIONS

Tree Health and Growing Conditions:

Best results are obtained when treatments are performed prior to infection. Treat trees when foliar symptoms (e.g., spot, defoliation, dieback) affect less than 10% of the canopy. Anticipate early season foliar infections, by treating prior to bud break (for example, apple scab).

Phytophthora root rot occurs most frequently in poorly drained and compacted soils. Susceptible species are at risk of infection following heavy precipitation or irrigation. Trees growing in low lying areas are also at risk of disease. Treat as early as possible in the infection cycle for best tree response.

For optimal uptake, apply when soil is moist, soil temperatures are above 45°F, ambient temperatures are between 40° to 90°F, and during the 24 hour period when transpiration is greatest, typically before 2:00 PM. Applications to drought or heat stressed trees may result in injury to tree tissue, poor treatment and subsequent control. Watering the trees prior to injection may enhance the uptake of PHOSPHO-jet.

RESTRICTIONS

- ✓ Do not inject trees more than once annually unless otherwise indicated
- ✓ Not recommended for newly planted (non-established) trees.
- ✓ DO NOT inject drought stressed trees.
- ✓ Do not treat trees that are damaged by herbicides.
- ✓ Do not inject trees within two weeks of any other spray or soil chemical treatment.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE:

Keep this product in containers stored upright and secured with the original closure. Do not store this product near any heat source. Do not store near any strong oxidants. If transfer to another container becomes necessary, ensure that the container is clearly labeled, the container is a type suitable for the product, and is clean and free of other materials. Keep from freezing.

DISPOSAL:

Nonrefillable container. Do not reuse or refill this container. Offer for recycling if available. If partly filled: Call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

NOTICE OF WARRANTY

ARBORJET, Inc makes no warranty of fitness of this product for any other purpose, beyond its uses under normal conditions in keeping with the statements made on this label.

Supplemental Label

Arborjet Injection Procedures

Measure the tree diameter at chest height (54" from ground) in inches to find the Diameter at Breast Height (DBH). If measuring circumference, divide this number by three to determine Diameter at Breast Height (DBH).

In general, make applications to actively growing trees in full leaf. Conditions that favor transpiration (e.g., high ambient humidity, adequate soil moisture) are optimal for injection uptake.

Inject into tree roots exposing them by shallow excavation or, alternatively into the trunk tissue at the base of the tree into active sapwood. Work around the tree, injecting 6.0 inches apart.

For *Phytophthora* (Sudden Oak Death, *Phytophthora ramorum*), inject every 6 inches around trunk circumference measured at 4 feet above the soil line.

Basic Arborjet Injection Procedures:

Drill 5/8" deep into the sapwood using the appropriate sized drill bit. Drill at a 90 degree angle to the stem (i.e., straight into the sapwood). Avoid drilling into dead, dying or diseased tissue, or tissue with visible injury or cracks. Use clean and sharp drill bits. Initially apply no pressure to the drill; the bit will naturally cut through the bark. It will stop penetrating when it meets the harder sapwood. Next apply pressure to the drill to cut 5/8" into the sapwood.

Insert an Arborplug, and tap in using the set tool and mallet. Use the #3 (9/32" d) or #4 (3/8" d) Arborplug in hardwoods; in conifers, use the #4 Arborplug. Using the injection needle, pierce the internal septum to start the injection process. Shut off and remove the injection needle upon completion.

Resinous Conifers [not for use in California]

In resinous conifers, such as pine and spruce insert the injection needle and open to start liquid flow immediately after inserting the Arborplug into the sapwood. A delay may reduce uptake due to resin flow.

Monocots [not for use in California]

Make applications into the lower stem, typically within 12" of the soil. **Only one application site is required.** Drill at least one third into the stem to the central vascular bundle (e.g., if the palm is 12" diameter, drill at least 4" deep), insert an Arborplug, tap in to create the injection site.

PHOSPHO-jet Application Rates for Micro-Injection Devices

See product label for application rate information.

Air/Hydraulic Micro-Injection Application

To inject, set the primary regulator to 75 PSI, charge the Dose-Sizer by pulling back on Dose-Sizer knob after priming, and apply the specified dose equally into the preset Arborplug.

QUIK-jet Micro-Injection Application

To Micro-Inject, set the Arborjet Tree Micro-Injector to the 5 ml setting. Draw formulation into the injector cylinder and squeeze handle to deliver the shot. Repeat until the full dose per injection site is delivered.

PHOSPHO-jet APPLICATION RATES
for Arborjet Micro-Infusion™ (i.e., Tree I.V.) Applications
(not for use in California)

Tree Size DBH"	# Injection sites	Rate ml/DBH"	Treatment Solution	
			PHOSPHO-jet ml/tree size (avg.) (1 part)	Water (2 parts)
6-8"	4	4	28	56
9-11"	4	5	50	100
12-14"	4	6	78	156
15-17"	8	7	112	224
18-20"	8	7	133	266
21-23"	8	7	154	308
24-26"	8	8	200	400
27-29"	12	8	224	448
30-32"	12	8	248	496
33-35"	12	9	306	612
36-38"	12	9	333	666
39-41"	16	9	360	720
42-44"	16	9	387	774
45-47"	16	9	414	828
48-50"	16	10	490	980
51-53"	20	10	520	1040
54-56"	20	10	550	1100
57-59"	20	10	580	1160
60-62"	20	10	610	1220
63-65"	24	10	640	1280
66-68"	24	10	670	1340
69-71"	24	11	770	1540

CLEAN-UP

IMPORTANT! It is critical to rinse the Arborjet Injection System thoroughly after use. Use **CLEAN-jet** or soap and water. Residues left in the device will corrode the internal components and void equipment warranty.

Fee for Service

pen
{836044ä~

This package includes the following

- ☐ New Registration
- ☒ Amendment

☐ Studies? ☐ Fee Waiver?

☐ volpay % Reduction: ____

for Division

- ☐ AD
- ☒ BPPD
- ☐ RD

Risk Mgr.

91

Receipt No.

S-

836044

EPA File Symbol/Reg. No.

74578-3

Pin-Punch Date:

9/15/2008



This item is NOT subject to FFS action.

Action Code:

Requested:

Granted:

Amount Due: \$ ____

Parent/Child Decisions:

☐ Inert Cleared for Intended Use

☐ Uncleared Inert in Product

Reviewer: L. Cole

Date: 9/17/08

Remarks:



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

September 18, 2008

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

DONNA LEVENTHAL
DELTA ANALYTICAL CORPORATION
ARBORJET
12510 PROSPERITY DRIVE, SUITE 160
SILVER SPRING, MD 20904

PRODUCT NAME: PHOSPHO-JET
COMPANY NAME: ARBORJET
OPP IDENTIFICATION NUMBER:
EPA FILE SYMBOL: 74578-3
EPA RECEIPT DATE: 09/15/08

SUBJECT: RECEIPT OF AMENDMENT

DEAR REGISTRANT:

The Office of Pesticide Programs has received your application for an amendment and it has passed an administrative screen for completeness.

During the initial screen we determined that the application appears to qualify for fast track review. The package will now be forwarded to the Product Manager for review to determine its acceptability for fast track status.

If you have any questions, please contact Biologicals & Pollution Prevention Division, PM Team 91, at (703) 308-9525.

Sincerely,

Pleasance
Front End Processing Staff
Information Services Branch
Information Technology & Resources Management Division

Receipt for Section 3					
S:	B36D44		Recumbent:	<input type="radio"/> Yes <input checked="" type="radio"/> No	
Regulatory Type:	Product Registration - Section 3		Fee For Service:	<input type="radio"/> Yes <input checked="" type="radio"/> No	
Application Type:	Amendment		Billable:	<input type="radio"/> Yes <input checked="" type="radio"/> No	
Company:	74578 ARBORJET		<input checked="" type="checkbox"/>		
Risk Manager:	Biologicals & Pollution Prevention Division, PM Team 91				
Product #:	74578-3	Product Name:	PHOSPHO-JET		
Override#:					
Me Too Section3:		Me Too Product Name:			
Application Date:	12-Sep-2008	OPP Rec'd Date:	15-Sep-2008		
Front End Date:	16-Sep-2008	Risk Manager Send Date:	18-Sep-2008		
FFS Due Date:		Negotiated Due Date:			
OPP Target Date:					
Fast Track:	<input type="checkbox"/>	New Ingredient:	<input type="checkbox"/>		
Receipt Description:	Label amendment			New Ingredient Request Date:	
	SEP 23 2008			New Ingredient Received Date:	
Form A:	<input type="checkbox"/>	Signature Date:		Form B:	<input type="checkbox"/>

Receipt Content

Fast Track Team - Andy

LH
10/6/08

AIO-Andy
OCT 7 2008
Solh



September 12, 2008

Document Processing Desk (AMEND)
Office of Pesticide Programs (7511)
Environmental Protection Agency
One Potomac Yard
2777 South Crystal Drive, Room S-4900
Arlington VA 22202

Attn: Linda Hollis, Chief Biochemical Pesticides Branch
Biopesticides and Pollution Prevention Division (BPPD)

RE: Label Amendment to change wording of directions

Product name: PHOSPHO-jet
EPA Reg. No.: 74578-3
Company: Arborjet, Inc.

Dear Ms. Hollis:

On behalf of Arborjet, Inc., I am submitting a label amendment for the product PHOSPHO-jet. The major purpose of the amendment is to simplify and clarify the directions for use in order to address issues raised by the State of California when we attempted to register the product there. Specifically, we are making the following changes:

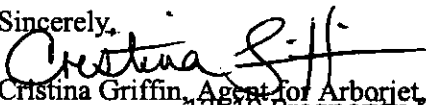
- Page 1: Added pest information under the product name.
- Page 2: No changes.
- Page 3 - 5, Directions: The directions have been revised significantly in order to clarify and simplify. Various tables have been consolidated. Steps have been numbered and examples added. The dosage has been revised to 1 part product to 2 parts water. Much of the information on Arborjet's injection systems has been moved to the back of the label as supplemental information on the application device.
- Page 6, Storage and Disposal: Added language to comply with EPA's Container Rule.
- Page 7 - 10, Residential Use sub-label: Same changes as above. (EPA's Container Rule necessitated few changes for the residential use label.)
- Page 11 - 12: Supplemental label: In order to clarify and simplify the label, we have moved all information on the Arborjet Injection Procedures to supplemental labeling. This information includes the Basic Arborjet injection procedures formerly included in the body of the label. It also includes dose rates when using micro-infusion.

Enclosures

- Application for Pesticide (EPA Form 8570-1)
- 5 copies of revised label

If you have questions regarding this submission or require additional information, please contact me at cgriffin@delta-ac.com or (301) 680-7971.

Sincerely,


Cristina Griffin, Agent for Arborjet, Inc.

12510 Prosperity Drive Suite 160 Silver Spring, Maryland 20904
(301) 680-7971 fax (301) 680-7975 www.delta-ac.com





United States
Environmental Protection Agency
Washington, DC 20460

☐ Registration
☐ Amendment
☒ Other

OPP Identifier Number

AMEND**Application for Pesticide - Section I**

1. Company/Product Number 74578-3	2. EPA Product Manager Linda Hollis, Chief Biochemical Pesticides Branch	3. Proposed Classification <input type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) ARBORJET, INC. / PHOSPHO-jet	PM# Biopesticides and Pollution Prevention Division	
5. Name and Address of Applicant (Include ZIP Code) ARBORJET, INC. c/o Delta Analytical Corp. 12510 Prosperity Dr. Suite 160 Silver Spring, MD 20904 <input type="checkbox"/> Check if this is a new address		6. Expedited Review. In accordance with FIFRA Section 3(c)(3)(b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____

Section - II

☒ Amendment - Explain below
☐ Resubmission in response to Agency letter dated _____
☐ Notification - Explain below.

☐ Final printed labels in response to Agency letter dated _____
☐ "Me Too" Application.
☐ Other - explain below.

Explanation: Use additional page(s) if necessary. (For section I and Section II.)
 Amendment to revise directions for use on label. No PRIA fee required.

Section - III

1. Material this Product will be Packaged In:			
Child-Resistant Packaging <input type="checkbox"/> Yes* <input type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	2. Type of Container <input type="checkbox"/> Metal <input type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____
* Certification must be submitted.		If "Yes," Unit Package wgt. No. per container	If "Yes," Unit Package wgt. No. per container
3. Location of Net Contents Information <input type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) of Retail Container	5. Location of Label Direction <input type="checkbox"/> On Label <input type="checkbox"/> On Labeling accompanying product
6. Manner In Which Label Is Affixed to Product <input type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled <input type="checkbox"/> Other _____			

Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)		
Name Cristina Griffin	Title Agent for Arborjet Inc.	Telephone No. (Include Area Code) 301-680-7971
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.		6. Date Application Received (Stamped)
2. Signature 	3. Title Agent for Arborjet Inc.	
4. Typed Name Cristina Griffin	5. Date September 12, 2008	

Material to be added to a Mini-Jacket (in the case where an e-Jacket exists)

Reg. No. 745 78-3

Send to SIG: check box ☐

This material is:

- ☐ New stamped-accepted label
- ☐ New CSF
- ☐ Notification
- ☒ Final Printed Label
- ☐ Other: _____

Instructions: Attach this notice on top of the material. It must be clipped all together and there should be NO STAPLES in the material. Then give the material with this coversheet to staff in the Information Services Center (Room 230).

Reviewer's Name: Carole Pollard

Phone: 308-0411 Division: B PPD

Date: 8/30/06

Receipt for Section 3

S: 790992

Resubmission: ☐ Yes ☒ No

Regulatory Type: ☒ Product Registration - Section 3

Fee For Service: ☒ Yes ☐ No

Application Type: ☒ Miscellaneous Receipt

Billable: ☒ Yes ☐ No

Company: 74578 ARBORJET

Risk Manager: Biologicals & Pollution Prevention Division - PM Team 91

Product #: 74578-3 Product Name: PHOSPHOJET

Overrider: []

Me Too Section: [] Me Too Product Name: []

Application Date: 14-Feb-2006 ☒

OPP Recvd Date: 27-Feb-2006 ☒

Front End Date: 27-Feb-2006 ☒

Risk Manager Send Date: 01-Mar-2006 ☒

FFS Due Date: []

Negotiated Due Date: []

OPP Target Date: []

Fast Track: ☐ New Ingredient: ☐

Receipt Description:

Final printed labels.
MAR 06 2006

New Ingredient Request Date: []
New Ingredient Received Date: []
Signature Date: []

Form A: ☐ Signature Date: []

Form B: ☐ Signature Date: []

Print Letter

Enter More Information

Tracking

Receipt Content

FAST Team

Shirley Nelson

CP

APR 11 2006

4/00

KA
3/8/06

Re-AIO

APR 10 2006

sdh

AIO

MAR 13 2006

sdh



February 14, 2006

Document Processing Desk (FINAL)
Office of Pesticide Programs (7504C)
U.S. Environmental Protection Agency
Ariel Rios Building
1200 Pennsylvania Ave NW
Washington, DC 20460

Attn: Todd Peterson, Insecticide-Rodenticide Branch

RE: Final label in response to EPA stamped label and letter dated Feb 7, 2006
Product: PHOSPHO-Jet
EPA Reg. No.: 74578-3
Company: Arborjet, Inc.

Dear Ms. Daniel:

On behalf of Arborjet, Inc., I am submitting the final printed label for PHOSPHO-jet, EPA Reg. No. 74578-3 per EPA approval letter of February 7, 2006.

Attached please find the following:

- EPA form 8570-1
- 3 copies of the final label
- EPA stamped label dated Feb 7, 2006

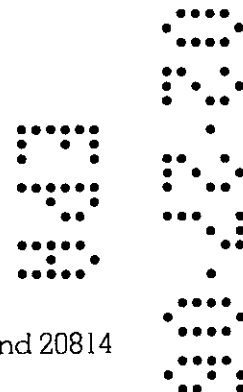
If you have any questions regarding this submission, please contact me at 301-652-5495 or dleventhal@delta-ac.com.

Sincerely,

Donna Leventhal
Agent for Arborjet, Inc.

Enclosures

cc: Joe Doccola, Arborjet
h:\arborjet\epa10a.phospho-jet.finallabel.cover.wpd





United States
Environmental Protection Agency
Washington, DC 20460

☐ Registration
☐ Amendment
☒ Other

OPP Identifier Number
306425

Application for Pesticide - Section I

1. Company/Product Number 74578-3	2. EPA Product Manager Todd Peterson	3. Proposed Classification <input type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) Arborjet, Inc. / PHOSPHO-jet	PM# Insecticide-Rodenticide	
5. Name and Address of Applicant (Include ZIP Code) Arborjet, Inc. c/o Delta Analytical Corp. 7910 Woodmont Ave. Suite 1000 Bethesda MD 20814 <input type="checkbox"/> Check if this is a new address		6. Expedited Review. In accordance with FIFRA Section 3(c)(3)(b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____

Section - II

☐ Amendment - Explain below
☐ Resubmission in response to Agency letter dated _____
☐ Notification - Explain below.

☒ Final printed labels in response to Agency letter dated **Feb 7, 2006**
☐ "Me Too" Application.
☐ Other - explain below.

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

Final Printed Label submission.

Section - III

1. Material this Product will be Packaged in:

Child-Resistant Packaging <input type="checkbox"/> Yes* <input type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	2. Type of Container <input type="checkbox"/> Metal <input type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____
* Certification must be submitted.			
If "Yes," Unit Package wgt. No. per container		If "Yes," Unit Package wgt. No. per container	

3. Location of Net Contents Information <input type="checkbox"/> Label <input type="checkbox"/> Container	4. Size(s) of Retail Container	5. Location of Label Direction <input type="checkbox"/> On Label <input type="checkbox"/> On Labeling accompanying product
--	--------------------------------	--

6. Manner In Which Label Is Affixed to Product <input type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled	<input type="checkbox"/> Other _____
---	--------------------------------------

Section - IV

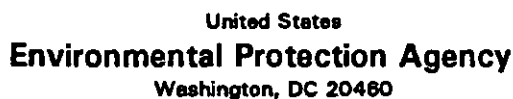
1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)

Name Donna Leventhal	Title Agent for Arborjet, Inc.	Telephone No. (Include Area Code) 301-652-5495
--------------------------------	--	--

Certification

I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any kind of knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

2. Signature 	3. Title Agent for Arborjet, Inc.	6. Date Application Received (Stamped)
4. Typed Name Donna Leventhal	5. Date February 14, 2006	



<input type="checkbox"/>	Registration
<input type="checkbox"/>	Amendment
<input type="checkbox"/>	Other

306425

Application for Pesticide - Section I

1. Company/Product Number	2. EPA Product Manager	3. Proposed Classification <input type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name)	PM#	
5. Name and Address of Applicant <i>(Include ZIP Code)</i> <input type="checkbox"/> Check if this is a new address		6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____

Section - II

<input type="checkbox"/> Amendment - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.
<input type="checkbox"/> Notification - Explain below.	<input type="checkbox"/> Other - Explain below.

Explanation: Use additional page(s) if necessary. (For section I and Section II.)

Section - III

1. Material This Product Will Be Packaged In:					
Child-Resistant Packaging <input type="checkbox"/> Yes* <input type="checkbox"/> No		Unit Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No		Water Soluble Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	
* Certification must be submitted		If "Yes" Unit Packaging wgt. No. per container		If "Yes" Package wgt No. per container	
2. Type of Container					
<input type="checkbox"/> Metal <input type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____					
3. Location of Net Contents Information		4. Size(s) Retail Container		5. Location of Label Directions	
<input type="checkbox"/> Label <input type="checkbox"/> Container				<input type="checkbox"/> On Label <input type="checkbox"/> On Labeling accompanying product	
6. Manner in Which Label is Affixed to Product		<input type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled <input type="checkbox"/> Other _____			

Section - IV

1. Contact Point <i>(Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)</i>		
Name	Title	Telephone No. <i>(Include Area Code)</i>
Certification I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment both under applicable law.		6. Date Application Received (Stamped)
2. Signature	3. Title	
4. Typed Name	5. Date	

PAPEKWORK REDUCTION ACT NOTICE and INSTRUCTIONS

PAPERWORK REDUCTION ACT NOTICE: Public reporting burden for this collection of information is estimated to average 0.85 hour per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Chief, Information Policy Branch, (2136), U.S. Environmental Protection Agency, 401 M Street, SW, Washington, DC 20460.

INSTRUCTIONS: This form is to be used for all applications for new registration, end use reregistration, amendment, resubmission, to applications for notifications, final printed labeling, reregistration, etc. In order to process an application for a new registration submitted on this form, the following material must accompany the application:

1. Certification with Respect to Citation of Data (EPA Form 8570-29). [If not exempted by 40 CFR 152.81 (b) (4)];
2. Confidential Statement of Formula (EPA Form 8570-4);
3. Formulator's Exemption Statement (EPA Form 8570-27);
4. Five copies of draft labeling;
5. Three copies of any data submitted;
6. Authorization letter where applicable;
7. Matrices where applicable.

Submission of Labeling - Labeling should first be submitted in the form of draft labels with all applications for new registration. Such draft labels may be in the form of typed label text on 8.5 x 11 inch paper for submission or a mockup of the proposed label. If prepared for mockup, it should be constructed in a way as to facilitate storage in an 8.5 x 11 inch file. Mockup labels significantly smaller than 8.5 x 11 inches should be mounted on 8.5 x 11 inch paper for submission.

Submission of Data - Data submitted in support of this application must be submitted in accordance with PR Notice 86-5.

SPECIFIC INSTRUCTIONS: Please read the instructions listed below before completing this application. First determine the type of registration action, listed in Block A, for which you are submitting this application. For applications submitted in connection with New Registration actions, Sections I, III, and IV must be completed by the applicant. For applications submitted in connection with amended reregistration actions, resubmissions, notifications, reregistrations, etc., Sections I, II, and IV must be completed by the applicant.

Block A - Check the appropriate action for which you are submitting this form.

SECTION I - This section must be completed, as applicable, for all registration actions.

1. **Company/Product Number** - Insert your Company Number, if one has been assigned by EPA. This number may have been assigned to you as a basic registrant, a distributor, or as an establishment. If your product is registered, insert the Product Number.
2. **EPA Product Manager** - If known, fill in the name and PM number of the EPA Product Manager.
3. **Proposed Classification** - Specify the proposed classification of this product.
4. **Product Name** - Enter the complete product name of this pesticide as it will appear on the label. The name must be specific to this product only. Duplication of names is not permitted among products of the same company. Do not include any brand name or company line designations.
5. **Name and Address of Applicant** - The name of the firm or person and address shown in your application is the person or firm to whom the registration will be issued. If you are acting in behalf of another party, you must submit authorization from that party to act for them in registration matters. An applicant not residing in the United States must have an authorized agent residing in the United States to act for them in all registration matters. The name and complete mailing address of such an agent must accompany this application.
6. **Expedited Review** - FIFRA section 3 (c) 3 (B) provides for expedited review of applications for registration, or amendments to existing registrations, that are similar or identical to other pesticide products that are currently registered with the EPA. In order for your application to be eligible for expedited review, you must provide us with the EPA Registration Number and product name of the product you believe is similar to or identical to your product. The product must be similar or identical in both formulation and labeled uses.

SECTION II - This section must be completed for all applications submitted to amend the registration only of a currently registered product (Amendment), for a resubmission in response to an Agency letter, for notifications to the Agency, for the submission of final printed labeling, for reregistration and for any other action that pertains to a specific EPA-registered product. This section is not to be used for a new application for registration.

1. **Subject of submission** - Check the applicable block and provide the Agency letter date if appropriate. Provide a brief explanation of the purpose(s) for the submission, such as "the addition of a site, pest or crop (specify)"; "amend the Confidential Statement of Formula by..."; "reregistration submission"; "general label revision of use directions." Attach a separate page if additional space is needed.

SECTION III (Packaging and Container Information) - This Section must be completed for all applications submitted in connection with new registration or applicable amendments.

1. **Type of Packaging** - Check the appropriate block if your product will be packaged in the indicated packaging types. Indicate the size of the individual packets and number per retail container.
2. **Type of Retail Container** - Indicate type of container in which product will be marketed.
3. **Location of Net Contents** - Indicate the location of the net contents information for your product.
4. **Size(s) of Retail Container** - Specify the net contents of all retail containers for your product.
5. **Location of Use Directions** - Indicate the location of the use directions for your product.
6. **Manner in which label is affixed to product** - Indicate the method product label is attached to retail container.

SECTION IV (Contact Point) - This Section must be completed for all applications for Registration actions, i.e., new products registration, resubmission, "me-too," reregistration, etc.

- 1-5. Self-explanatory.
6. EPA Use Only.

Master label including Sub-label A – Commercial Agricultural Uses and Sub-label B – Residential Uses

Sub-label A – Commercial Agricultural Uses

[company logo]

PHOSPHO-jet

[Systemic Fungicide]

Systemic fungicide for the suppression of various plant diseases including black spot, scab, fire blight in apple, root rot in avocado and citrus, bud rot and nut fall in coconut, downy mildew in grape, anthracnose in mango, sycamore, and dogwood, *Phytophthora* in ornamentals, including oak and *Phytophthora* in conifers.

ACTIVE INGREDIENTS: Mono-and di-potassium salts of Phosphorous Acid.....45.8%
OTHER INGREDIENTS:.....54.2%
TOTAL100.0%

Contains: 5.17lbs/gallon of the active ingredients, mono- and di-potassium salts of Phosphorous acid
Equivalent to 3.35 lbs Phosphorous acid/gallon

EPA Reg. No. 74578-3

EPA Est. No. 74578-MA-001

Manufactured by:

ARBORJET, Inc.
99 Blueberry Hill Road
Woburn, MA 01801
(781) 721-0795

Net Contents: [1 Quart], [1 Gallon], [5 gallons], [20 gallons], [55 gallons]

KEEP OUT OF REACH OF CHILDREN CAUTION

FIRST AID	
IF SWALLOWED:	<ul style="list-style-type: none">• Call a poison control center or doctor immediately for treatment advice.• Have person sip a glass of water if able to swallow.• Do not induce vomiting unless told to do so by a poison control center or doctor.• Do not give anything by mouth to an unconscious person.
IF IN EYES:	<ul style="list-style-type: none">• Hold eye open and rinse slowly and gently with water for 15-20 minutes.• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.• Call a poison control center or a doctor for treatment advice.
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none">• Take off contaminated clothing.• Rinse skin immediately with plenty of water for 15-20 minutes.• Call a poison control center or a doctor for treatment advice.
IF INHALED:	<ul style="list-style-type: none">• Move person to fresh air.• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferable mouth-to-mouth, if possible.• Call a poison control center or a doctor for treatment advice.
Have the product container of label with you when calling a poison control center or doctor or going for treatment. You may also contact the National Poison Control Hotline at 1-800-222-1222, 24 hours a day, 7 days a week.	

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION. Harmful if swallowed, inhaled or absorbed through skin. Causes moderate eye irritation. Avoid breathing vapors or spray mist. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear protective eyewear, long pants and long-sleeved shirt, waterproof gloves, shoes plus socks.

Follow manufacturer's instructions for maintaining/cleaning personal protective equipment (PPE). If no such instructions for washables, use hot water and detergent. Keep and wash PPE separately from other laundry.

When handlers use closed systems, aircraft or enclosed cabs in a manner that meets the requirements listed in the worker protection standard (WPS) for agricultural pesticides (40 CFR 170.240 (d) (4-6), the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should:

- Wash hands before drinking, eating, chewing gum, using tobacco, or using the toilet.
- Remove PPE clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

Read entire label before using this product.

Do not apply this product in any way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide registration.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Workers Protection Standard, CFR 40 part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 4 hours.

PPE required for early entry to treated areas that are permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soils or water, is: coveralls, waterproof gloves, shoes plus socks, and protective eyewear.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements of this box apply to uses of this product that are not within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR part 170.) The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries or greenhouses.

Do not enter treated areas without protective clothing until sprays have dried.

GENERAL APPLICATION INSTRUCTIONS

This product is for use only with the **ARBORJET TREE INJECTION SYSTEMS** or those systems approved by ARBORJET, INC.

CALCULATING DOSAGE AND MIXING INSTRUCTIONS

To determine a specific dosage, refer to Tables 3-7. Dosage is based on tree diameter and size class (exception: Coconut Palm). PHOSPHO-*jet* must be diluted with water. Water is added at 5 to 15 times the PHOSPHO-*jet* rate. For example, to calculate the dosage to treat a 10"DBH oak for root rot, (see Table 5) add 20ml of PHOSPHO-*jet* (2ml x 10"DBH) to the tank into 100ml (5x 20ml) water for a Total Injection Volume (TIV) of 120ml. Close the canister and gently agitate to mix. Next pressurize the container and prime. You are now ready to inject. Refer to the Arborjet Training Manual for specific device set-up.

MIXING INSTRUCTIONS

1. Fill the tank with the volume of water required before adding PHOSPHO-*jet*
2. Add PHOSPHO-*jet* slowly to the tank, close and agitate to mix.

COMPATIBILITY

PHOSPHO-*jet* is compatible with most products used in agriculture. However, individual crop sensitivity to these mixtures may vary. Mixtures of PHOSPHO-*jet* with copper products are not always compatible or cause phytotoxicity to some plants. If these combinations or others have not been used previously, do not tank mix without first testing the compatibility of the tank mix. Do not apply tank mixture without first assessing its safety to the crop (phytotoxicity). Tank mix PHOSPHO-*jet* with fertilizers only if crop safety has been established and the PHOSPHO-*jet* use rates are followed.

Due to PHOSPHO-*jet*'s acidic nature, do not use acidifying-type compatibility agents. If adjuvants are used, test them before use to confirm compatibility with PHOSPHO-*jet*.

Use a jar test to confirm compatibility with PHOSPHO-*jet*. In a clean jar using the same water source that is normally used to fill spray tank, add the appropriate quantity of water and mix thoroughly. Let stand for 3 minutes. If mixture remains in solution or is remixed readily, the tank mixture is compatible.

Spray the solution that results from the above compatibility test onto a few plants until foliage is visibly wet and inspect for visual effects of phytotoxicity (leaf burn) 3-7 days later.

Restrictions

- ✓ Do not inject trees more than once annually unless otherwise indicated
- ✓ Not recommended for newly planted (non-established) trees.
- ✓ DO NOT inject drought stressed trees.
- ✓ Do not treat trees that are damaged by herbicides.
- ✓ Do not inject trees within two weeks of any other spray or soil chemical treatment.

Arborjet Micro-infusion Procedures

Measure the tree diameter at chest height (54" from ground) in inches to find the Diameter at Breast Height (DBH). If measuring circumference, divide this number by three to determine Diameter at Breast Height (DBH).

In general, make applications to actively growing trees in full leaf. Conditions that favor transpiration (e.g., high ambient humidity, adequate soil moisture) are optimal for injection uptake.

Inject into tree roots exposing them by shallow excavation or, alternatively into the trunk tissue immediately above the trunk flare, selecting the injection site in the first few xylem elements (i.e., active sapwood). Work around the tree, injecting no closer than 6.0 inches apart. Refer to Tables 1 & 2 below to determine the optimum number of injection sites to apply. DO NOT inject trees stressed by drought. Irrigate trees prior to treatment for optimal product uptake.

Basic Arborjet VIPER Procedures: Drill 5/8" deep into the sapwood using the appropriate sized drill bit. Drill at a 90 degree angle to the stem (i.e., straight into the sapwood). Avoid drilling into dead, dying or diseased tissue, or tissue with visible injury or cracks. Use clean and sharp drill bits. Initially apply no pressure to the drill; the bit will naturally cut through the bark. It will stop penetrating when it meets the harder sapwood. Next apply pressure to the drill to cut 5/8" into the sapwood.

- A. Set an Arborplug in place using the set tool and mallet. In hardwoods use the #3 (9/32" d) Arborplug; in conifers, use the #4 (3/8" d) Arborplug. Using the VIPER needle, pierce the internal septum to start the micro-infusion process. Remove the VIPER needle upon completion.
- B. Alternatively insert the #2 (7/32" d) STINGER (removable injector tip) by gently pushing in with a twisting motion. Remove STINGERS upon completion of infusion process. Refer to Table 2 when selecting the STINGER method.

Resinous Conifers

In resinous conifers, such as pine and spruce start the micro-infusion process immediately after setting of the Arborplug into the sapwood. A delay may reduce uptake efficacy on account of resin flow.

Table 1 Tree diameter, range of trunk application sites and Arborplug size selection for VIPER method

Tree DBH	Number of Application Sites	Size of Arborplug™ (Hardwoods) 9/32" drill bit	Size of Arborplug™ (Conifers) 3/8" drill bit
6-16"	4	#3	#4
17-20"	6	#3	#4
21-28"	8	#3	#4
29-32"	10	#3	#4
33-36"	12	#3	#4
>36"	Use DBH/3	#3	#4

Table 2 Tree Diameter, Number of Application Sites using the STINGER tip

Tree DBH	Number of Application Sites (Hardwoods) 7/32" drill bit
6-16"	4
17-20"	6
21-28"	8
29-32"	10
33-36"	12
>36"	Use DBH/3

Monocots

In general, make applications into the lower stem, typically within 12" of the soil. **Only one application site is required.**

1. Drill a pilot hole into the vascular bundle using a 3/16" diameter bit one third into the stem (e.g., if the palm is 12" diameter, then drill 4" deep), then drill a wider (7/32" drill bit), shallow hole (5/8" deep) for a #2 Arborplug™, use the VIPER needle to complete the application.
2. Alternatively, insert the STINGER tip to inject.

When to Treat/Timing of Stem Injection Applications:

Tree Health and Growing Conditions:

Best results are obtained when treatments are performed prior to infection. Treat trees when foliar symptoms (e.g., spot, defoliation, dieback) affect less than 10% of the canopy. Anticipate early season foliar infections, by treating prior to bud break. An example is anthracnose (*Apiognomia* spp.).

Phytophthora root rot occurs most frequently in poorly drained and compacted soils. Susceptible species are at risk of infection following heavy precipitation or irrigation. Trees growing in low lying areas are also at risk of disease. Treat as early as possible in the infection cycle for best tree response.

Trees may be treated when soil temperatures range from 45-90 degrees F. Treat when there is adequate soil moisture. Do not treat in the heat of day or treat drought stressed trees. **DO NOT** treat when ambient temperatures exceed 90 degrees F. Treating on excessively hot, humid days may result in foliar burn.

Time of Day:

Best uptake in trees by trunk injection occurs when trees are actively transpiring. In general, treat early to mid morning throughout the growing season. When temperatures rise and relative humidity drops, the efficiency of uptake is reduced. In arid environments, overcast, cool days result in the most efficient uptake of PHOSPHO-jet.

AGRICULTURAL CROPS

Table 3 PHOSPHO-jet Application Rates for Avocado and Citrus

Crop Plant	Target Pest	When to Treat	Plant Size Class (DBH")	Rate (ml/DBH")	Dilution (ml water/DBH")
Avocado (<i>Persea Americana</i> cvs.)	<i>Phytophthora</i> root rot (<i>Phytophthora cinnamomi</i>), <i>Phytophthora</i> canker (<i>P. citricola</i>)	Inject trees at spring flush maturity. Repeat treatment in February or March.	<12"	2	10
			12-23"	4	20
			24-35"	6	30
			36"+	8	40
Citrus (<i>Citrus</i> spp.)	Root rot and collar rot (<i>Phytophthora</i> spp. <i>P. nicotiane</i> and <i>P. citrophthora</i>)	When conditions favor disease	<12"	2	10
			12-23"	4	20
			24-35"	6	30
			36"+	8	40

Table 3a PHOSPHO-jet Application Rates for Coconut

Crop Plant	Target Pest	When to Treat	Rate per Tree (ml)	Volume of Water in tank (ml)
Coconut (<i>Cocos nucifera</i>)	Coconut bud rot and premature nut fall (<i>Phytophthora katsurae</i>)	When conditions favor disease	30	150

Table 3b PHOSPHO-jet Application Rates in Stone Fruit*

Crop Plant	Target Pest	When to Treat	Plant Size Class (DBH")	Rate (ml/DBH")	Dilution (ml water/DBH")
Stone fruits such as, but not limited to cherries, peaches and plums	Root and collar rot (<i>Phytophthora</i> spp.)	When conditions favor disease	<12"	2	10-30
			12-23"	4	20-60
			24"+	6	30-90

*Not for use in California.

LANDSCAPE, GOLF COURSE, PLANTATION, FORESTRY AND PARK APPLICATIONS**

Use PHOSPHO-jet for effective control of *Phytophthora* and *Pythium* diseases associated with stem and Canker Blight (Sudden Oak Death, *Phytophthora ramorum*), Beech Decline, and general tree declines in landscapes, plantation trees, golf courses, forests and parks. Apply PHOSPHO-jet to trees such as, but not limited to, Beech, Cedar, Chestnut, Crab Apple, Dogwood, Elm, Fir, Hawthorne, Juniper, Linden, Monterey Pine, Oaks (Coastal, Live, Shreve, Black, Canyon), Ornamental Pear, Sweet Birch, Sweet Gum, White Pine, White Cedar, and Willow.

Make applications before disease development and in conjunction with good cultural management practices. Do not exceed indicated application rates or apply more frequently than stated on label or tree injury may occur. Do not apply to trees that are heat or moisture stressed. Do not apply to trees that are in a state of dormancy.

Table 4 PHOSPHO-jet Application Rates for Oaks in California

Landscape, Golf Course, Plantation, Forest, and Park Applications	Target Pest	When to Treat	Tree Size Class (DBH")	Rate (ml/DBH")	Dilution (ml water/DBH")
Oak (<i>Quercus</i> spp.) including tan oak, coast live oak and black oak trees	<i>Phytophthora</i> and <i>Pythium</i> spp., and Sudden oak death <i>Phytophthora ramorum</i>	When conditions favor disease	<12"	2	10
			12-23"	4	20
			24-35"	6	30
			36"+	8	40

**Use in California limited to Oaks (Coastal, Live, Shreve, Black, Canyon) and Tan Oaks.

Table 5 PHOSPHO-jet Application Rates for Hardwood Trees

Landscape, Golf Course, Plantation, Forest, and Park Applications	Target Pest	When to Treat	Tree Size Class (DBH")	Rate (ml/DBH")	Dilution (ml water/DBH")
Intermediate uptake trees such as, Ash (<i>Fraxinus</i> spp.), Maple (<i>Acer</i> spp.)	Anthracnose (<i>Apiognomonina</i> spp.) including <i>Gnomonia platani</i>)	Treat early, prior to bud break or when conditions favor disease (cool, wet)	<12" 12-23" 24-35" 36"+	2	30
	Stem canker, Root rot (<i>Phytophthora</i> spp.)	When conditions favor disease		4 6 8	60 90 120
Fast uptake trees such as, Beech (<i>Fagus</i> spp.), Birch (<i>Betula</i> spp.), Elm (<i>Ulmus</i> spp.), Linden (<i>Tilia</i> spp.), Oak (<i>Quercus</i> spp.), and Sycamore (<i>Platanus</i> spp.), Willow (<i>Salix</i> spp.)	Anthracnose (<i>Apiognomonina</i> spp.) including <i>Gnomonia platani</i>)	Treat early, prior to bud break or when conditions favor disease (cool, wet)	<12" 12-23" 24-35" 36"+	2	10
	Stem canker, Root rot (<i>Phytophthora</i> spp.)	When conditions favor disease		4 6 8	20 30 40

Table 6 PHOSPHO-jet Application Rates for Ornamental Trees

Landscape, Golf Course, Plantation, Forest, and Park Applications	Target Pest	When to Treat	Tree DBH	Rate (ml/DBH")	***Dilution (ml water/DBH")
Dogwood (<i>Cornus florida</i>)	Anthracnose (<i>Discula destructiva</i>)	Treat early Spring, prior to bud break	<12" 12-23" 24"+	2 4 6	10-30 20-60 30-90
	<i>Phytophthora</i> spp.	When conditions favor disease			
Crabapple (<i>Malus</i> spp.), Hawthorne (<i>Crataegus</i> spp.), Ornamental Pear (<i>Pyrus</i> spp.)	Black Spot (<i>Diplocarpon rosae</i>)	Treat early Spring, prior to bud break			
	Scab (<i>Venturia inaequalis</i>)				
	Fireblight (<i>Erwinia amylovora</i>)	Treat early Spring, prior to bud break			
	<i>Phytophthora</i> spp.	When conditions favor disease			

***High volume rate is derived by diluting the formulation with up to 15 parts water. Use the highest rate when uptake is slow.

Table 7 PHOSPHO-jet Application Rates for Conifers

Landscape, Golf Course, Plantation, Forest, and Park Applications	Target Pest	When to Treat	Tree DBH	Rate (ml/DBH")	***Dilution (ml water/DBH")
Slow uptake trees such as Conifers including, Cedars (<i>Thuja occidentalis</i> , <i>Chamaecyparis</i> spp.), Firs (<i>Abies fraseri</i> , Hemlock (<i>Tsuga</i> spp.), Juniper (<i>Juniperus</i> spp.), and Pine (<i>Pinus strobus</i>)	Stem canker, root rot (<i>Phytophthora</i> <i>ra</i> spp.)	When conditions favor disease	<12"	1	5-15
			12-23"	2	10-30
			24-35"	3	15-45
			36"+	4	20-60

***High volume rate is derived by diluting the formulation with up to 15 parts water. Use the highest rate when uptake is slow.

CLEAN-UP

IMPORTANT! It is critical to rinse the Arborjet Injection System thoroughly after use. Use **CLEAN-jet** or soap and water. Residues left in the device will corrode the internal components and void equipment warranty.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE:

Keep this product in containers stored upright and secured with the original closure. Do not store this product near any heat source. Do not store near any strong oxidants. If transfer to another container becomes necessary, ensure that the container is clearly labeled, the container is a type suitable for the product, and is clean and free of other materials. Keep from freezing.

PESTICIDE DISPOSAL:

Wastes resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL:

Do not reuse empty container. Triple rinse (or equivalent) and offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by incineration, or if allowed by state and local authorities, by burning. If burned, keep out of smoke.

NOTICE OF WARRANTY

ARBORJET, Inc makes no warranty of fitness of this product for any other purpose, beyond its uses under normal conditions in keeping with the statements made on this label.

[company logo]

PHOSPHO-jet**[Systemic Fungicide]**

Systemic fungicide for the suppression of various plant diseases including black spot, scab, fire blight in apple, root rot in avocado and citrus, bud rot and nut fall in coconut, downy mildew in grape, anthracnose in mango, sycamore, and dogwood, *Phytophthora* in ornamentals, including oak and *Phytophthora* in conifers.

ACTIVE INGREDIENTS: Mono- and di-potassium salts of Phosphorous Acid.....45.8%
 OTHER INGREDIENTS:.....54.2%
 TOTAL.....100.0%

Contains: 5.17lbs/gallon of the active ingredients, mono- and di-potassium salts of Phosphorous acid
 Equivalent to 3.35 lbs Phosphorous acid/gallon

EPA Reg. No. 74578-3

EPA Est. No. 74578-MA-001

Manufactured by:

ARBORJET, Inc.
 99 Blueberry Hill Road
 Woburn, MA 01801
 (781) 721-0795

Net Contents:

- ☐ 1 Quart
☐ 1 Gallon
☐ 5 Gallons

KEEP OUT OF REACH OF CHILDREN
CAUTION

FIRST AID	
IF SWALLOWED:	<ul style="list-style-type: none"> • Call a poison control center or doctor immediately for treatment advice. • Have person sip a glass of water if able to swallow. • Do not induce vomiting unless told to do so by a poison control center or doctor. • Do not give anything by mouth to an unconscious person.
IF IN EYES:	<ul style="list-style-type: none"> • Hold eye open and rinse slowly and gently with water for 15-20 minutes. • Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. • Call a poison control center or a doctor for treatment advice.
IF ON SKIN OR CLOTHING:	<ul style="list-style-type: none"> • Take off contaminated clothing. • Rinse skin immediately with plenty of water for 15-20 minutes. • Call a poison control center or a doctor for treatment advice.
IF INHALED:	<ul style="list-style-type: none"> • Move person to fresh air. • If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferable mouth-to-mouth, if possible. • Call a poison control center or a doctor for treatment advice.
Have the product container of label with you when calling a poison control center or doctor or going for treatment. You may also contact the National Poison Control Hotline at 1-800-222-1222, 24 hours a day, 7 days a week.	

PRECAUTIONARY STATEMENTS HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION. Harmful if swallowed, inhaled or absorbed through skin. Causes moderate eye irritation. Avoid breathing vapors or spray mist. Avoid contact with skin, eyes, or clothing. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment washwaters or rinsate.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling. Read entire label before using this product. For use in home gardens and ornamentals.

GENERAL APPLICATION INSTRUCTIONS

This product is for use only with the **ARBORJET TREE INJECTION SYSTEMS** or those systems approved by **ARBORJET, INC.**

CALCULATING DOSAGE AND MIXING INSTRUCTIONS

To determine a specific dosage, refer to Table below. Dosage is based on tree diameter and size class (exception: Coconut Palm). **PHOSPHO-jet** must be diluted with water. Water is added at 5 to 15 times the **PHOSPHO-jet** rate. For example, to calculate the dosage to treat a 10"DBH oak for root rot, (see Table 5) add 20ml of **PHOSPHO-jet** (2ml x 10"DBH) to the tank into 100ml (5x 20ml) water for a Total Injection Volume (TIV) of 120ml. Close the canister and gently agitate to mix. Next pressurize the container and prime. You are now ready to inject. Refer to the Arborjet Training Manual for specific device set-up.

MIXING INSTRUCTIONS

1. Fill the tank with the volume of water required before adding **PHOSPHO-jet**
2. Add **PHOSPHO-jet** slowly to the tank, close and agitate to mix.

Arborjet Micro-infusion Procedures

Measure the tree **diameter** at chest height (54" from ground) in inches to find the Diameter at Breast Height (DBH). If measuring circumference, divide this number by three to determine Diameter at Breast Height (DBH).

In general, make applications to actively growing trees in full leaf. Conditions that favor transpiration (e.g., high ambient humidity, adequate soil moisture) are optimal for injection uptake.

Inject into tree roots exposing them by shallow excavation or, alternatively into the trunk tissue immediately above the trunk flare, selecting the injection site in the first few xylem elements (i.e., active sapwood). Work around the tree, injecting no closer than 6.0 inches apart. Refer to Tables 1 & 2 below to determine the optimum number of injection sites to apply. **DO NOT** inject trees stressed by drought. Irrigate trees prior to treatment for optimal product uptake.

Basic Arborjet VIPER Procedures: Drill 5/8" deep into the sapwood using the appropriate sized drill bit. Drill at a 90 degree angle to the stem (i.e., straight into the sapwood). Avoid drilling into dead, dying or diseased tissue, or tissue with visible injury or cracks. Use clean and sharp drill bits. Initially apply no pressure to the drill; the bit will naturally cut through the bark. It will stop penetrating when it meets the harder sapwood. Next apply pressure to the drill to cut 5/8" into the sapwood.

- A. Set an Arborplug in place using the set tool and mallet. In hardwoods use the #3 (9/32" d) Arborplug; in conifers, use the #4 (3/8" d) Arborplug. Using the VIPER needle, pierce the internal septum to start the micro-infusion process. Remove the VIPER needle upon completion.

- B. Alternatively insert the #2 (7/32" d) STINGER (removable injector tip) by gently pushing in with a twisting motion. Remove STINGERS upon completion of infusion process. Refer to Table 2 when selecting the STINGER method.

Resinous Conifers

In resinous conifers, such as pine and spruce start the micro-infusion process immediately after setting of the Arborplug into the sapwood. A delay may reduce uptake efficacy on account of resin flow.

Table 1 Tree diameter, range of trunk application sites and Arborplug size selection for VIPER method

Tree DBH	Number of Application Sites	Size of Arborplug™ (Hardwoods) 9/32" drill bit	Size of Arborplug™ (Conifers) 3/8" drill bit
6-16"	4	#3	#4
17-20"	6	#3	#4
21-28"	8	#3	#4
29-32"	10	#3	#4
33-36"	12	#3	#4
>36"	Use DBH/3	#3	#4

Table 2 Tree Diameter, Number of Application Sites using the STINGER tip

Tree DBH	Number of Application Sites (Hardwoods) 7/32" drill bit
6-16"	4
17-20"	6
21-28"	8
29-32"	10
33-36"	12
>36"	Use DBH/3

Monocots

In general, make applications into the lower stem, typically within 12" of the soil. **Only one application site is required.**

1. Drill a pilot hole into the vascular bundle using a 3/16" diameter bit one third into the stem (e.g., if the palm is 12" diameter, then drill 4" deep), then drill a wider (7/32" drill bit), shallow hole (5/8" deep) for a #2 Arborplug™, use the VIPER needle to complete the application.
2. Alternatively, insert the STINGER tip to inject.

When to Treat/Timing of Stem Injection Applications:

Tree Health and Growing Conditions:

Best results are obtained when treatments are performed prior to infection. Treat trees when foliar symptoms (e.g., spot, defoliation, dieback) affect less than 10% of the canopy. Anticipate early season foliar infections, by treating prior to bud break. An example is anthracnose (*Apiognomia* spp.).

Phytophthora root rot occurs most frequently in poorly drained and compacted soils. Susceptible species are at risk of infection following heavy precipitation or irrigation. Trees growing in low lying areas are also at risk of disease. Treat as early as possible in the infection cycle for best tree response.

Trees may be treated when soil temperatures range from 45-90 degrees F. Treat when there is adequate soil moisture. Do not treat in the heat of day or treat drought stressed trees. DO NOT treat when ambient temperatures exceed 90 degrees F. Treating on excessively hot, humid days may result in foliar burn.

Time of Day:

Best uptake in trees by trunk injection occurs when trees are actively transpiring. In general, treat early to mid morning throughout the growing season. When temperatures rise and relative humidity drops, the efficiency of uptake is reduced. In arid environments, overcast, cool days result in the most efficient uptake of PHOSPHO-jet.

Table 3 PHOSPHO-jet Application Rates for Avocado and Citrus

Plant	Target Pest	When to Treat	Plant Size Class (DBH")	Rate (ml/DBH")	Dilution (ml water/DBH")
Avocado (<i>Persea Americana</i> cvs.)	<i>Phytophthora</i> root rot (<i>Phytophthora cinnamomi</i>), <i>Phytophthora</i> canker (<i>P. citricola</i>)	Inject trees at spring flush maturity. Repeat treatment in February or March.	<12"	2	10
			12-23"	4	20
			24-35"	6	30
			36"+	8	40

Table 3a PHOSPHO-jet Application Rates for Coconut

Plant	Target Pest	When to Treat	Rate per Tree (ml)	Volume of Water in tank (ml)
Coconut (<i>Cocos nucifera</i>)	Coconut bud rot and premature nut fall (<i>Phytophthora katusae</i>)	When conditions favor disease	30	150

Table 3b PHOSPHO-jet Application Rates in Stone Fruit*

Plant	Target Pest	When to Treat	Plant Size Class (DBH")	Rate (ml/DBH")	Dilution (ml water/DBH")
Stone fruits such as, but not limited to cherries, peaches and plums	Root and collar rot (<i>Phytophthora</i> spp.)	When conditions favor disease	<12"	2	10-30
			12-23"	4	20-60
			24"+	6	30-90

*Not for use in California.

LANDSCAPE APPLICATIONS**

Use PHOSPHO-jet for effective control of Phytophthora and Pythium diseases associated with stem and Canker Blight (Sudden Oak Death, *Phytophthora ramorum*), Beech Decline, and general tree declines in landscapes. Apply PHOSPHO-jet to trees such as, but not limited to, Beech, Cedar, Chestnut, Crab Apple, Dogwood, Elm, Fir, Hawthorne, Juniper, Linden, Monterey Pine, Oaks (Coastal, Live, Shreve, Black, Canyon), Ornamental Pear, Sweet Birch, Sweet Gum, White Pine, White Cedar, and Willow.

Make applications before disease development and in conjunction with good cultural management practices. Do not exceed indicated application rates or apply more frequently than stated on label or tree injury may occur. Do not apply to trees that are heat or moisture stressed. Do not apply to trees that are in a state of dormancy.

Table 4 PHOSPHO-jet Application Rates for Oaks in California

Landscape Plant	Target Pest	When to Treat	Tree Size Class (DBH")	Rate (ml/DBH")	Dilution (ml water/DBH")
Oak (<i>Quercus</i> spp.) including tan oak, coast live oak and black oak trees	<i>Phytophthora</i> and <i>Pythium</i> spp., and Sudden oak death <i>Phytophthora ramorum</i>	When conditions favor disease	<12"	2	10
			12-23"	4	20
			24-35"	6	30
			36"+	8	40

**Use in California limited to Oaks (Coastal, Live, Shreve, Black, Canyon) and Tan Oaks.

Table 5 PHOSPHO-jet Application Rates for Hardwood Trees

Landscape Plant	Target Pest	When to Treat	Tree Size Class (DBH")	Rate (ml/DBH")	Dilution (ml water/DBH")
Intermediate uptake trees such as, Ash (<i>Fraxinus</i> spp.), Maple (<i>Acer</i> spp.)	Anthracnose (<i>Apiognomonia</i> spp.) including <i>Gnomonia platani</i>) Stem canker, Root rot (<i>Phytophthora</i> spp.)	Treat early, prior to bud break or when conditions favor disease (cool, wet) When conditions favor disease	<12"	2	30
			12-23"	4	60
			24-35"	6	90
			36"+	8	120
Fast uptake trees such as, Beech (<i>Fagus</i> spp.), Birch (<i>Betula</i> spp.), Elm (<i>Ulmus</i> spp.), Linden (<i>Tilia</i> spp.), Oak (<i>Quercus</i> spp.), and Sycamore (<i>Platanus</i> spp.), Willow (<i>Salix</i> spp.)	Anthracnose (<i>Apiognomonia</i> spp.) including <i>Gnomonia platani</i>); Stem canker, Root rot (<i>Phytophthora</i> spp.)	Treat early, prior to bud break or when conditions favor disease (cool, wet) When conditions favor disease	<12"	2	10
			12-23"	4	20
			24-35"	6	30
			36"+	8	40

Table 6 PHOSPHO-jet Application Rates for Ornamental Trees

Landscape Plant	Target Pest	When to Treat	Tree DBH	Rate (ml/DBH")	***Dilution (ml water/DBH")
Dogwood (<i>Cornus florida</i>)	Anthracnose (<i>Discula Destructiva</i>)	Treat early Spring, prior to bud break	<12" 12-23" 24"+	2 4 6	10-30 20-60 30-90
	<i>Phytophthora</i> spp.	When conditions favor disease			
Crabapple (<i>Malus</i> spp.), Hawthorne (<i>Crataegus</i> spp.), Ornamental Pear (<i>Pyrus</i> spp.)	Black Spot (<i>Diplocarpon rosae</i>) Scab (<i>Venturia inaequalis</i>)	Treat early Spring, prior to bud break			
	Fireblight (<i>Erwinia amylovora</i>)	Treat early Spring, prior to bud break			
	<i>Phytophthora</i> spp.	When conditions favor disease			

***High volume rate is derived by diluting the formulation with up to 15 parts water. Use the highest rate when uptake is slow.

Table 1 / PHOSPHO-jet Application Rates for Conifers

***High volume rate is derived by diluting the formulation with up to 15 parts water. Use the highest rate when uptake is slow.

Landscape Plant	Target Pest	When to Treat	Tree DBH	Rate (ml/DBH")	***Dilution (ml water/DBH")
Slow uptake trees such as Conifers including, Cedars (<i>Thuja occidentalis</i>, <i>Chamaecyparis</i> spp.), Firs (<i>Abies fraseri</i>, Hemlock (<i>Tsuga</i> spp.), Juniper (<i>Juniperus</i> spp.), and Pine (<i>Pinus strobus</i>)	Stem canker, root rot (<i>Phytophthora</i> spp.)	When conditions favor disease	<12"	1	5-15
			12-23"	2	10-30
			24-35"	3	15-45
			36"+	4	20-60

CLEAN-UP

IMPORTANT! It is critical to rinse the Arborjet Injection System thoroughly after use. Use **CLEAN-jet** or soap and water. Residues left in the device will corrode the internal components and void equipment warranty.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

PESTICIDE STORAGE:

Keep this product in containers stored upright and secured with the original closure. Do not store this product near any heat source. Do not store near any strong oxidants. If transfer to another container becomes necessary, ensure that the container is clearly labeled, the container is a type suitable for the product, and is clean and free of other materials. Keep from freezing.

DISPOSAL:

If empty: Do not reuse empty container. Place in trash and offer for recycling if available. If partly filled: Call your local solid waste agency or 1-800-CLEANUP (1-800-253-2687) for disposal instructions. Never place unused product down any indoor or outdoor drain.

NOTICE OF WARRANTY

ARBORJET, Inc makes no warranty of fitness of this product for any other purpose, beyond its uses under normal conditions in keeping with the statements made on this label.